UPS-T-4

BEFORE THE
POSTAL RATE COMMISSION

POSTAL RATE AND FEE CHANGES, 1997	:	DOCKET NO. R97-1

DIRECT TESTIMONY OF
RALPH L. LUCIANI
ON BEHALF OF
UNITED PARCEL SERVICE

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1   **INTRODUCTION**

2   My name is Ralph L. Luciani. I am a Director of Putnam, Hayes &

3   Bartlett, Inc., an economic and management consulting firm with offices in

4   Washington, D.C.; Cambridge, Massachusetts; Los Angeles and Palo Alto,

5   California; a New Zealand subsidiary and an Australian subsidiary; and a United

6   Kingdom affiliate, Putnam, Hayes & Bartlett, Ltd., with an office in London. I have

7   more than twelve years of consulting experience analyzing economic and financial

8   issues affecting regulated industries, including costing, ratemaking, business

9   planning, and competitive strategy issues. In addition to my consulting duties, I

10   serve as the Director of Professional Development at Putnam, Hayes & Bartlett,

11   Inc.

12   Since 1990, I have directed Putnam, Hayes & Bartlett, Inc.'s analytic

13   investigations of United States Postal Service ("Postal Service") costing and rate

1   design issues. In Docket No. R90-1 and again in Docket No. R94-1, I assisted Dr.

2   George R. Hall in the preparation of analyses and testimony regarding the

3   attributable costs, cost coverages, and rate design of Parcel Post, Priority Mail, and

4   Express Mail. In Docket No. R94-1, I assisted Dr. Colin C. Blaydon in the

5   preparation of analyses and testimony concerning the treatment of mixed mail costs

6   in the In-Office Cost System ("IOCS"). In Docket No. MC95-1, I presented

7   testimony regarding the costs associated with parcels handled by the Postal

8   Service in First Class and Standard (A) Mail. I also presented supplemental

9   testimony in Docket No. MC95-1 regarding rate design for Standard (A) parcels.

10   Since 1995, I have visited and observed the operations at a number

11   of Postal Service facilities, including the Washington BMC on two different

12   occasions, two Sectional Center Facilities, two Associate Offices/Delivery Units, a

13   HASP ("Hub and Spoke Project") facility, and an Air Mail Center.

14   I hold a B.S. with University Honors in Electrical Engineering and

15   Economics from Carnegie Mellon University. I also hold an M.S. with Distinction

16   from the Graduate School of Industrial Administration at Carnegie Mellon

17   University. Prior to joining Putnam, Hayes & Bartlett, Inc. in 1985, I worked as an

18   Edison engineer at General Electric Company and as a financial analyst at IBM

19   Corporation.

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PURPOSE OF TESTIMONY AND
SUMMARY OF CONCLUSIONS

3   I have been asked to investigate the costing and rate design

4   proposals of the Postal Service as they pertain to Parcel Post and Priority Mail. As

5   part of this investigation, I reviewed the testimony and workpapers of Postal

6   Service witnesses Crum (USPS-T-28), Daniel (USPS-T-29), Hatfield (USPS-T-16),

7   Mayes (USPS-T-37), Plunkett (USPS-T-40), Sharkey (USPS-T-33), and Treworgy

8   (USPS-T-22).

9   Based on my review, I have reached the following conclusions with

10   respect to the Postal Service's proposals:

11   1.   The Postal Service has overstated the avoided costs

12   underlying the proposed Parcel Post worksharing discounts.

13   2.   The passthroughs proposed for the Parcel Post worksharing

14   discounts do not reflect the uncertainties associated with the avoided cost

15   estimates and should be reduced.

16   3.   The methodology used to derive the rates for workshared

17   Parcel Post mail deviates from prior Postal Service and Commission practice and

18   should be modified.

19   4.   The Postal Service's treatment of intermediate Parcel Post

20   transportation costs should be refined. In addition, rate design changes are

21   needed to minimize rate inconsistencies resulting from the proposed change in

22   transportation costing.

1   5.   The cost of processing Priority Mail parcels is significantly

2   higher than the cost of processing Priority Mail flats. As a result, separate rate

3   treatment for Priority Mail parcels is required.

4   6.   The Postal Service's treatment of Priority Mail delivery

5   confirmation costs is inequitable and should be revised.

6   7.   Alaska non-preferential air costs should be fully attributed.

7   However, if the Commission does not do so, at a minimum all non-bypass Alaska

8   non-preferential Parcel Post air transportation costs should be attributed to Parcel

9   Post.

10
11   **THE POSTAL SERVICE HAS OVERSTATED
THE COSTS AVOIDED BY PARCEL**
12   **POST WORKSHARING**

13   In addition to the existing DBMC discount, the Postal Service

14   proposes five new discounts for: (1) Inter-BMC presorting, (2) OBMC entry, (3)

15   DSCF entry, (4) DDU entry, and (5) Prebarcoding. As discussed in detail below,

16   five of these six worksharing discounts are based on overstated estimates of

17   avoided costs.

18   **A. DBMC Entry**

19   Mr. Crum estimates that DBMC entry saves 9.2 cents per piece in

20   window and acceptance costs and 37.7 cents per piece in mail processing costs,

1   for a total non-transportation avoided cost of 46.9 cents per piece.[1] The estimate

2   of 37.7 cents per piece in avoided mail processing costs represents a dramatic

3   increase from the (pre-passthrough) estimated avoided mail processing costs of

4   11.3 cents per piece and 13.4 cents per piece determined by the Commission in

5   Docket Nos. R90-1 and R94-1, respectively.[2] When compared to the estimated

6   avoided costs actually passed through by the Commission in those cases, the

7   difference is even more dramatic -- a proposed mail processing discount of 37.7

8   cents in this case compared to 8.7 cents and 10.3 cents in Docket Nos. R90-1 and

9   R94-1, respectively. [3]

10   This dramatic increase in estimated avoided costs raises questions

11   about the validity of the Postal Service's estimates in this case. In fact, in

12   computing estimated avoided mail processing costs for DBMC entry, Mr. Crum

13   failed to follow past Postal Service and Commission practice in at least two

14   significant ways.

1.   USPS-T-28, p. 3.

2.   Docket No. R90-1, PRC-LR-7, DBMC Calculations, p. 2; Docket No. R94-1,
      PRC-LR-12, Development of Parcel Post Rates, p. 18.

3.   Id.

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**1. Mr. Crum overstates the pool of costs
that DBMC entry avoids**

3   DBMC entry avoids outgoing mail processing costs at non-BMCs, i.e.,

4   mail processing costs incurred at the origin AO and the origin SCF. In the past, the

5   Postal Service has not counted as part of the costs avoided by DBMC entry any of

6   the costs of the mail preparation and platform acceptance operations.[4] In addition,

7   the Postal Service also made a premium pay adjustment to the costs avoided.[5]

8   Mr. Crum removed the costs of these two operations and also made a

9   premium pay adjustment in his derivation of the avoided cost for DBMC entry in

10 Docket No. MC97-2.[6] However, in this proceeding Mr. Crum has not removed the

11 costs of these operations from his avoided cost estimate, nor did he make a

12 premium pay adjustment. As can be seen from Table 1, adjusting for the costs of

13 these excluded operations and for premium pay reduced the estimated DBMC entry

14 avoided costs significantly in Docket Nos. R90-1 and MC97-2.

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4.   Mail preparation is the operation in which mail is prepared for distribution, including the rewrapping of damaged pieces; platform acceptance is the operation in which mail is accepted at the platform. LR-H-1, pages 3-3, 3-2. In the past, the Postal Service (and the Commission) also did not count the costs of the postage due and central mail markup operations as avoided costs. However, in FY 1996 there are no outgoing costs for the postage due and central mail markup operations.

5.   Docket No. R90-1, USPS-T-12, Exhibit L. A premium pay adjustment takes into account differences in the extent to which individual subclasses incur night and Sunday labor costs.

6.   Docket No. MC97-2, USPS-T-7, Exhibit C; id., USPS-LR-PCR-39, Table 1, p. 1.1.

1 **Table 1: Postal Service Calculation of DBMC Entry Avoided Costs**

2 *(Thousands of Base Year Dollars)*

	USPS R90-1	Crum MC97-2	Crum R97-1
3 Outgoing Mail Processing Costs	26,884	53,484	56,746
4 *(minus)* Cost of Excluded Operations	5,565	6,450	N/A
5 *(minus)* Outgoing Costs at BMCs	12,975	33,188	32,769
6 *(minus)* Premium Pay Adjustment	405	716	N/A
7 Outgoing Costs Avoided by DBMC Entry	7,937	13,129	23,977

8 Sources: Docket No. R90-1, USPS-T-12, Exhibit L; Docket No. MC97-2, USPS-LR-PCR-39,
9   Table 1, p. 1.1; LR-H-144, Table 1, p. 5.

10   The platform acceptance cost savings are reflected in Mr. Crum's

11 avoided window and acceptance costs for DBMC entry. By not excluding platform

12 acceptance operation costs in deriving the avoided mail processing costs for

13 DBMC entry, Mr. Crum counts these same costs as avoided twice. This clear

14 double-count inflates the proposed discount.

15   On cross-examination, Mr. Crum stated that he did not exclude the

16 costs of these operations from his avoided cost calculations in this case because

17 he was no longer able to separately break out these costs. Tr. 5/2285, 2294.

18 However, UPS witness Sellick (UPS-T-2) has done so using the Postal Service's

19 IOCS database and modified versions of Postal Service witness Degen's computer

20 programs.[7] Table 2 compares the avoided costs underlying the Postal Service's

21 proposed discount with the avoided costs resulting from the established

22 methodology.

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7.   UPS-T-2, p. 21, Table 6.

| 1 | Table 2: Revised Calculation of DBMC Entry Avoided Costs |

2   *(Thousands of Base Year Dollars)*

	Crum R97-1 (Proposed)	Crum R97-1 (Revised)
Outgoing Mail Processing Costs	56,746	56,744
(minus) Cost of Excluded Operations	N/A	4,250
(minus) Outgoing Costs at BMCs	32,769	31,686
(minus) Premium Pay Adjustment	N/A	885
Outgoing Costs Avoided by DBMC Entry	23,977	19,923

8   Sources: LR-H-144, Table 1, p. 5; UPS-T-2, p. 21, Table 6.

9   As shown in Exhibit UPS-T-4A, removing the costs of these

10   operations from the avoided cost calculation and making a premium pay adjustment

11   decreases the non-transportation avoided cost for DBMC entry by 6.3 cents per

12   piece.

13   **2. Mr. Crum fails to adjust DBMC avoided**
14   **costs for ASF costs**

15   Contrary to prior Commission rulings,[8] Mr. Crum also failed to

16   exclude any ASF costs from the pool of outgoing mail processing costs avoided by

17   DBMC entry. On cross-examination he stated, without giving any analytic basis,

18   that the exclusion of ASF data from the avoided mail processing cost calculation in

19   this proceeding would make little or no difference. Tr. 5/2297. However, the

20   Commission's exclusion of ASF costs from the pool of mail processing costs

8.   Opinion and Recommended Decision, Docket No. R90-1, p. V-349.

1   avoided by DBMC entry decreased the DBMC discount considerably in both Docket

2   Nos. R90-1 and R94-1.[9]

3   ASFs are unique facilities that act as SCFs and also as BMCs. Tr.

4   5/2297. The In-Office Cost System classifies a substantial amount of BMC costs as

5   outgoing mail processing costs. These costs are incurred in two operations: (1)

6   unloading at the BMC's platform through the primary sort for DBMC and intra-BMC

7   parcels, and (2) all processing activities for inter-BMC parcels at the origin BMC.[10]

8   Thus, ASFs incur outgoing costs when acting as SCFs and also when acting as

9   BMCs.

10   Mr. Crum treats outgoing mail costs at BMCs as not avoided by

11   DBMC parcels. Under similar logic, those outgoing mail costs which are incurred at

12   ASFs when the ASF is acting as a BMC also should not be treated as avoided by

13   DBMC parcels.[11] Those outgoing mail costs which are incurred at ASFs when the

14   ASF is acting as a BMC should therefore be removed from Mr. Crum's DBMC entry

15   cost savings.

16   I used Ms. Daniel's model of Parcel Post BMC operations to derive

17   the mail processing costs in cents per piece that are classified as "outgoing" at the

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9.   Docket No. R90-1, PRC-LR-7, DBMC Calculations, p. 2; Docket No. R94-1,
      PRC-LR-12, Development of Parcel Post Rates, p. 18.

10.   LR-H-49, Appendix B, p. 144.

11.   DBMC and intra-BMC parcels originating and destinating in the same ASF
      area are generally not handled at a BMC. Tr. 19/9591. Thus, outgoing
      costs at ASFs include the costs of processing DBMC parcels that are
      dropped at the ASF and never handled at a BMC. Yet, Mr. Crum assumes
      that these outgoing costs at ASFs, which are clearly incurred by DBMC
      parcels, are avoided by DBMC parcels. This simply cannot be the case.

1   I used Ms. Daniel's model of Parcel Post BMC operations to derive

2   the mail processing costs in cents per piece that are classified as "outgoing" at the

3   BMC. I then applied these average outgoing BMC mail processing costs per piece

4   to the ASF Parcel Post volumes supplied by Ms. Mayes (Tr. 8/4121-31) in order to

5   estimate the outgoing mail processing costs incurred at ASFs when an ASF is

6   acting as a BMC. This yields an estimate of $3.4 million. See Exhibit UPS-T-4B.

7   This is a conservatively low estimate, since the parcel sorting productivity at ASFs

8   is almost certainly lower -- and therefore the ASF costs are almost certainly higher -

9   - than what Ms. Daniel derives for the fully-mechanized BMCs.

10   I then deducted these ASF outgoing mail processing costs from Mr.

11   Crum's avoided mail processing costs for DBMC entry. This correction lowers the

12   DBMC non-transportation discount by an additional 5.4 cents per piece. See

13   Exhibit UPS-T-4B.

14   **3. Revised DBMC entry avoided cost**

15   The combined effect of the revisions discussed above is shown in

16   Table 3.

1   **Table 3: Revised DBMC Entry Avoided Mail Processing Costs**

2   *(Thousands of Base Year Dollars)*

	Crum R97-1 (Proposed)	Crum R97-1 (Revised)
3 Outgoing Mail Processing Costs	56,746	56,744
4 *(minus)* Cost of Excluded Operations	0	4,250
5 *(minus)* Outgoing Costs at BMCs	32,769	31,686
6 *(minus)* Premium Pay Adjustment	0	885
7 *(minus)* ASF Outgoing Costs when ASF Acts As a BMC	0	3,372
8 Outgoing Costs Avoided by DBMC Entry	23,977	16,551
9 DBMC Avoided Mail Processing Costs (TY cents per piece)	37.7	26.0

10   Sources: Docket No. R90-1, USPS-T-12; Docket No. MC97-2, USPS-LR-PCR-39;
11   LR-H-144; UPS-T-2; Exhibit UPS-T-4B.

12   These changes reduce the DBMC mail processing avoided cost estimate by 11.7

13   cents per piece, yielding a revised DBMC mail processing avoided cost of 26.0

14   cents per piece. Adding the window and acceptance cost savings of 9.2 cents per

15   piece yields a total revised non-transportation avoided cost for DBMC entry of 35.2

16   cents per piece.

17   **B.   OBMC Entry**

18   The OBMC entry avoided cost (which is deducted from the inter-BMC

19   rates) is calculated as the sum of the DBMC entry non-transportation avoided cost

20   plus additional costs saved at the OBMC itself (due to the presorting requirement

21   for the OBMC discount).[12] Thus, the 11.7 cents per piece decrease in avoided

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12.   USPS-T-28, p. 4. Mr. Crum estimates OBMC entry avoided costs to be 57.6
       cents per piece.

1   costs for DBMC entry derived above also reduces the avoided costs for OBMC

2   entry by 11.7 cents per piece. This yields a revised OBMC entry avoided cost of

3   45.9 cents per piece.

4   C. DSCF Entry

5   The Postal Service overstates the avoided costs for DSCF entry in

6   three ways: (1) it overstates the number of DSCF parcels per container; (2) it fails

7   to include in the cost of DSCF parcels the cost of Postal Service assistance in

8   unloading DSCF parcels; and (3) it overestimates the transportation costs avoided

9   by DSCF entry.

10   1. The number of DSCF entry parcels
11   per container is overstated

12   In deriving the non-transportation cost avoided by DSCF entry, Mr.

13   Crum assumed that, on average, sacks would contain 10 machinable DSCF

14   parcels and GPMCs would contain 25 non-machinable DSCF parcels.[13] On cross-

15   examination, Mr. Crum stated that the source of his assumption is the Domestic

16   Mail Manual, Quick Service Guide 700 (machinable parcels). Tr. 5/2290.

17   However, that document cannot be used to determine the number of machinable

18   parcels that will, on average, actually be in a sack. It merely requires that each

19   sack contain, at a minimum, 10 pieces or 20 pounds or 1000 cubic inches.

20   Consequently, a sack could contain one 20-pound parcel, or two 10-pound parcels,

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13.   USPS-T-28, page 5.

1   or four 5-pound parcels (for example). Moreover, there is a 70 pound weight limit

2   on sacks.[14] Thus, no more than three 20-pound parcels are allowed in a sack.

3   Rather than <u>assuming</u> how many machinable parcels would be in a

4   sack, Ms. Daniel uses actual data to derive the average number of machinable

5   parcels per sack for Parcel Post as a whole. Tr. 5/2649. Based on prior Postal

6   Service studies and current Postal Service data, Ms. Daniel arrives at an average

7   of 5.8 machinable parcels per sack. Tr. 5/2649. Ms. Daniel applies this 5.8 pieces

8   per sack figure throughout her Parcel Post cost analysis, including her analysis of

9   machinable DBMC entry parcels.

10   Moreover, Ms. Daniel bases her Parcel Post cost analysis on the

11   assumption that, on average, parcels will comprise 85% of the effective cubic

12   capacity of a container, including containers used for non-machinable DBMC entry

13   mail.[15] She assumes that parcels will comprise a slightly higher percentage -- 88%

14   -- of the effective cubic capacity of the gaylords used for OBMC entry parcels.[16] To

15   be conservative, I similarly assumed that DSCF entry parcels would comprise 88%

16   of the effective cubic capacity of GPMCs. This yields an average of 17.4 non-

17   machinable DSCF pieces per GPMC. See Exhibit UPS-T-4C.

18   On cross-examination Mr. Crum suggested -- again without relying on

19   any data -- that while the Postal Service may, on occasion, transport less than fully

20   loaded sacks or containers, DSCF mailers would likely fill their sacks and GPMC

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14.   Docket No. MC97-2, response to OCA/USPS-T13-11.

15.   USPS-T-29, Appendix V, p. 17.

16.   USPS-T-29, Appendix V, page 17.

1   containers completely. Mr. Crum's assertion has no analytic basis, as there has

2   been no special study performed of DSCF entry parcels. Mr. Crum acknowledged

3   that the last DSCF sack to a 5-digit area is unlikely to be fully loaded. Tr. 5/2291.

4   Moreover, the data indicate that there will be fewer pieces per container for DSCF

5   mail than for Parcel Post as a whole. In particular, Mr. Hatfield's data shows that

6   DBMC entry mail -- which includes DSCF entry mail -- is significantly less dense

7   than Parcel Post as a whole.[17] Thus, a sack of DSCF parcels will, on average,

8   contain fewer pieces than a sack of regular Parcel Post. Ms. Daniel's derivation of

9   5.8 machinable pieces per sack is based on data for all of Parcel Post and

10   therefore likely overstates the number of DSCF pieces in a sack. Similarly, fewer

11   non-machinable DSCF pieces will fit in a GPMC than the 17.4 pieces per GPMC

12   derived using Ms. Daniel's methodology, which also is based on all Parcel Post

13   pieces.

14   In short, there is substantial reason to believe that 5-digit sacks and

15   GPMCs entered at a DSCF will have fewer pieces, on average, than is the case for

16   Parcel Post as a whole. As such, the derivation of the avoided cost for DBMC mail

17   should be based on no more than the average number of pieces per container for

18   Parcel Post as a whole -- 5.8 machinable pieces per sack and 17.4 non-machinable

19   pieces per GPMC. This lowers the non-transportation DSCF cost savings by 4.8

20   cents per piece, as shown in Exhibit UPS-T-4C.

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17.   USPS-T-16, page 14, and Appendix II thereto, page 9 of 9.

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    2. The Postal Service's analysis ignores the cost of Postal Service assistance in unloading DSCF entry parcels

3   In deriving the costs avoided by DSCF entry, Mr. Crum assumes that

4   the shipper will unload the dropshipped parcels without Postal Service assistance.

5   Tr. 5/2271. On cross-examination, he agreed that this assumption is contrary to

6   current Postal Service DSCF dropshipment procedures. Tr. 5/2282-83. Those

7   procedures explicitly provide that the Postal Service will unload dropshipped

8   containers at the DSCF and will assist in unloading dropshipped bedloaded mail.

9   Tr. 5/2400. There is no reason to believe that the Postal Service will not follow its

10   current procedures at SCFs for DSCF Parcel Post volume. Indeed, given Mr.

11   Crum's revision to his initial testimony on this point, the Postal Service apparently

12   has no intention of changing its current SCF dropshipment unloading procedures.

13   Tr. 5/2398.

14   Consistent with this Postal Service policy, DSCF costs should include

15   100% of the cost of unloading DSCF entry GPMC containers and the Postal

16   Service should be assumed to incur 50% of the cost of unloading bedloaded DSCF

17   entry Parcel Post sacks for "assisting" in unloading bedloaded mail. This

18   decreases the DSCF entry non-transportation avoided cost by an additional 1.9

19   cents per piece. See Exhibit UPS-T-4D.

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3. The Postal Service overstates the transportation cost avoided by DSCF entry

3   According to Mr. Hatfield, DSCF parcels will incur local transportation

4   costs of $0.3997 per cubic foot, of which $0.3337 is from the DSCF to the DDU

5   and $0.0660 is for transportation below the level of the DDU.[18] In deriving these

6   costs, Mr. Hatfield simply assumes that DSCF parcels will have the same local

7   transportation cost as DBMC parcels.

8   However, as Ms. Daniel and Mr. Crum agree, only 87.7% of Parcel

9   Post volume travels from a DSCF to the DDU.[19] The remaining 12.3% travels

10   directly from the DBMC to the DDU; these parcels currently do not incur any local

11   transportation cost for the DSCF to DDU leg. Thus, the actual cost incurred by

12   parcels that travel on the DSCF to DDU leg -- which all DSCF entry parcels will do -

13   - is 12.3% higher than Mr. Hatfield calculates. Mathematically, the proper

14   calculation is as follows:

15   *Average cost incurred*   *Actual cost incurred*
16   *from DSCF to DDU   = 87.7%   * from DSCF to DDU   + 12.3% * Zero = $0.3337 per cubic*
17   *foot.*

18   Therefore, using simple algebra,

19   Actual cost incurred from DSCF to DDU = $0.3337 per cubic foot / 87.7% = $0.3805 per cubic foot.

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18.   USPS-T-16, p. 24; Exhibit USPS-16A; and Appendix III to USPS-T-16, p. 9 of 9.

19.   USPS-T-28, p. 5; USPS-T-29, Appendix V, p.1.

1   This 12.3% upward adjustment to DSCF transportation costs has

2   exactly the same basis as the 12.3% upward adjustment that Mr. Crum makes to

3   Ms. Daniel's Parcel Post costs in deriving the DSCF non-transportation discount.[20]

4   Since 100% of DSCF mail will inevitably travel from the DSCF to the DDU, the

5   transportation cost incurred by DSCF mail from the DSCF to the DDU <u>must</u> be

6    $0.3805 per cubic foot, not $0.3337 per cubic foot.[21] This yields a revised total

7   DSCF transportation cost of $0.4465 per cubic foot, as shown in Table 4.

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20.   See USPS-T-28, Exhibit G, page 2 of 3.

21.   On cross-examination, Mr. Hatfield admitted that the transportation cost from
       the DSCF to the DDU would be higher for DSCF mail than for DBMC mail,
       except when the DSCF is co-located with the DDU. Tr. 8/3957-58. On
       follow-up, the Postal Service stated that parcels dropshipped to a co-located
       DSCF/DDU which destinate within the DDU's service area would qualify for
       the DDU discount, not the DSCF discount. Tr. 19/9555. This means that
       100% of the parcels receiving the DSCF discount will travel to a non-co-
       located DDU. In other words, Mr. Hatfield's co-location point is not relevant
       to the proper calculation of DSCF costs.

1 **Table 4: DSCF Transportation Cost**

2 *($ per cubic foot)*

Transportation Segment	Postal Service	Revised
DSCF to DDU Leg	0.3337	0.3805
Below the level of the DDU	0.0660	0.0660
Total	0.3997	0.4465

7 Sources: Exhibit USPS-16A; USPS-T-16, Appendix III, p. 9 of 9.

8 **4. Revised DSCF Avoided Costs**

9 Table 5 compares the Postal Service's DSCF avoided costs to the

10 avoided costs resulting from the revisions discussed above.

11 **Table 5: Revised DSCF Avoided Costs**

	Proposed	Revised
DSCF Avoided Non-Transportation Cost (off of DBMC costs)	31.4 cents/piece	24.8 cents/piece
DSCF Transportation Cost	$0.3997/c.f.	$0.4465/c.f.
DSCF Avoided Transportation Cost (off of DBMC Zone ½ costs)	$0.3138/c.f.	$0.2670/c.f.

17 Sources: Exhibit UPS-T-4C; Exhibit UPS-T-4D; Exhibit USPS-16A; USPS-T-28,
18   p. 6. DBMC Zone ½ transportation cost is $0.7135 per cubic foot, per
19   Exhibit USPS-16A; therefore, DSCF avoided transportation cost =
20          $0.7135 - $0.4465, or $0.2670.

21 **D.   DDU Entry**

22 The Postal Service made no effort to determine the container profile

23 of DDU entry parcels. On cross-examination, Mr. Crum stated that he does not

24 need to know anything about the containerization of DDU parcels, since the mailer

1   will unload the parcels. Tr. 5/2263. However, Mr. Crum admitted that in deriving

2   the non-transportation cost avoided by DDU entry, he simply assumed that the

3   mailer will shake out the DDU entry sacks after unloading them. Tr. 5/2316.

4   Under current Postal Service policy, there is no requirement for DDU

5   entry mailers to shake out sacks (Tr. 5/2310), and it is highly unlikely that they will

6   do so. It is unclear where the sacks would be shaken out by the mailer. Would this

7   take place on the platform? If so, would this be an efficient place to shake out the

8   sacks? Or would the mailer actually enter the DDU and shake out the sacks in the

9   parcel sortation area? That is unlikely.

10   On cross-examination, Mr. Crum had no specific answer. Tr. 5/2316.

11   In the absence of any evidence that the practice will be contrary to current policy, it

12   is more likely that the sacks would merely be unloaded onto the platform by the

13   DDU entry mailer and left for the Postal Service to shake out once the sacks reach

14   the manual parcel sortation area.

15   The percentage of sacks in DDU entry mail is unknown. Assuming

16   that the number of sacks in these dropshipments would be consistent with the

17   percentage arriving at the DDU for Parcel Post as a whole reduces the DDU

18   discount by 1.1 cents per piece. See Exhibit UPS-T-4E. In the absence of a

19   special study of the costs incurred through different containerization for DDU entry,

20   the 1.1 cents per piece of sack shakeout costs should be eliminated from the

1   estimate of the costs avoided by DDU entry. This lowers the avoided cost for DDU

2   entry as compared to DBMC mail to 44.8 cents per piece. See Exhibit UPS-T-4E.[22]

3   E.   Prebarcoding

4   In deriving the prebarcode discount, Ms. Daniel computes a cost

5   savings (including piggybacked costs) of 2.16 cents per piece. She then applies a

6   1.621 "adjustment" factor that increases this amount to 3.50 cents, and adds 0.5

7   cents per piece in ribbon costs to derive an estimated savings of 4 cents per piece,

8   as shown below.

9   Table 6: Postal Service Derivation of Prebarcode Savings
10   (cents per piece)

Cost of Keying	5.76
(minus) Cost of Scan	3.60
Savings of Scan vs. Key	2.16
(times) Adjustment Factor	1.621
Adjusted Savings	3.50
(plus) Ribbon Cost	0.50
Total Savings	4.00

18   Source: Exhibit USPS-29E, p. 6 of 6.

19   Ms. Daniel's adjustment factor attempts to adjust for costs that were

20   not explicitly captured in her Parcel Post processing flow models. While the use of

21   a non-modeled cost factor may arguably be appropriate when determining a cost

22.   Correcting the rounding errors in Mr. Crum's analysis yields a DDU discount
       of 45.9 cents per piece, rather than the 46.0 cents per piece he shows. The
       1.1 cents per piece reduction noted above is in addition to that correction.

1 differential across a broad range of numerous processing activities (such as that

2 between inter-BMC and intra-BMC Parcel Post), the use of this highly aggregate

3 multiplier in the derivation of the narrowly focused prebarcode savings, where only

4 one operation is involved, inflates the modeled cost savings.

5 Prebarcoding simply replaces one key punch with a scan. Ms. Daniel

6 has derived the exact cost difference between these two actions. That cost

7 difference is 2.16 cents per piece and includes the impact of piggybacked indirect

8 costs. To say that this very small and specific difference should then be grossed

9 up by an additional 62% because Ms. Daniel has missed 38% of the cost she

10 expected to find in her analyses for Parcel Post in its entirety is erroneous.

11 Ms. Daniel stated that non-modeled costs in the PSM key/scan area

12 could be comprised of such activities as miskeying, the barcode label peeling off,

13 and running out of labels. Tr. 5/2556. However, one could just as easily presume

14 that non-modeled costs could include the prebarcoded label falling off, the

15 prebarcoded label being incorrect, the prebarcoded label being obstructed or

16 otherwise unreadable, or the prebarcoded piece being inadvertently keyed. In

17 other words, there is no difference in these respects between Postal Service

18 barcoded pieces and mailer prebarcoded pieces.

19 Ms. Daniel has not shown that there are non-modeled costs for keying

20 in comparison to scanning that are proportional to modeled costs. In the absence

21 of any evidence that there are non-modeled costs which have a proportional

22 relationship to the cost of scanning in comparison to keying, the computation of the

1   prebarcode avoided cost should exclude Ms. Daniel's highly aggregate adjustment

2   factor.

3   F.   Summary of Revisions

4   Table 7 shows revised avoided cost estimates for Parcel Post

5   worksharing resulting from the corrections discussed above.

6   Table 7: Revised Parcel Post Worksharing Avoided Costs
7   (cents per piece, unless noted)

Avoided Cost	Proposed	Revised
DBMC Non-Transportation (off of Intra-BMC)	46.9	35.2
OBMC Non-Transportation (off of Inter-BMC)	57.2	45.9
BMC Presort Non-Transportation (off of Inter-BMC)	12.5 to 13.9	12.5 to 13.9
Prebarcoding	4.00	2.66
DSCF Non-Transportation (off of DBMC)	31.3	24.8
DSCF Transportation (off of DBMC Zone 1/2)	$0.3138/cubic foot	$0.2670/cubic foot
DDU Non-Transportation (off of DBMC)	46.0	44.8
DDU Transportation (off of DBMC Zone 1/2)	$0.6475/cubic foot	$0.6475/cubic foot

17   Sources: USPS-T-37, WP I.I., page 1; USPS-T-29, Exhibit 29E, p. 1; Exhibit
18   USPS-16A; USPS-T-28, p. 8.

19   THE POSTAL SERVICE'S EXCESSIVELY HIGH
20   PASSTHROUGHS FAIL TO REFLECT THE
21   UNCERTAINTY OF THE AVOIDED COST ESTIMATES

22   The Postal Service passes through 98% to 100% of the estimated

23   mail processing cost savings and 100% of the estimated transportation cost

24   savings for all but one of the proposed discounts.[23] These high passthroughs fail

25   to reflect the significant uncertainty surrounding the estimated cost savings,

_____

23.   The passthrough for the machinable BMC presort discount is 90%.

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1 especially for the new discounts. In fact, in Docket No. R90-1 and again in Docket

2 No. R94-1 the Commission passed through only 77% of the identified DBMC non-

3 transportation cost savings.[24]

4   As outlined below, the same 77% passthrough for DBMC non-

5 transportation savings applied in prior cases should also be applied to the DBMC

6 cost savings estimated in this case, since the uncertainty surrounding this

7 worksharing program has not diminished. For the five new discounts, a 77%

8 passthrough should be applied for both the transportation and non-transportation

9 avoided costs.

10   The first reason for using 77% passthroughs for the new discounts is

11 based on the Commission's decision in Docket No. R90-1 regarding the

12 passthroughs for the new DBMC, DDU, and DSCF destination entry discounts

13 proposed in that case for what was then Third Class mail. The Postal Service there

14 proposed 70% passthroughs of both transportation and non-transportation cost

15 savings for these new discounts. The Commission, after correcting the avoided

16 cost estimates and noting that a passthrough as high as 80% could be applied,

17 accepted the discounts proposed by the Postal Service. This yielded effective

18 passthroughs of 76% to 80%.[25] These Docket No. R90-1 passthroughs for new

19 destination entry discounts are consistent with the 77% passthrough applied by the

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24. Opinion and Recommended Decision, Docket No. R94-1, page V-118.

25. Opinion and Recommended Decision, Docket No. R90-1, pages V-283 to V-284.

1   Commission to the DBMC Parcel Post worksharing savings estimated in Docket

2   Nos. R90-1 and R94-1.

3   The second reason for limiting the passthroughs to 77% is the impact

4   of the new worksharing programs on non-worksharing mailers. The Postal Service

5   proposes a 10.2 percent increase in Parcel Post rates as a whole.[26] Hidden in this

6   average rate increase are significantly larger rate increases for the non-workshared

7   rate categories of Parcel Post than for the workshared rate categories, as Table 8

8   shows.

9   **Table 8:   Percentage Changes in Parcel Post Rates**
10   **for Existing Volume by Rate Category,**
11   **Including Impact of New Rate Discounts**

	TYBR Revenue per Piece ($/piece)	TYAR Revenue per Piece ($/piece)	Percentage Increase
Non-workshared Inter-BMC	4.69	5.46	16.5%
Non-workshared Intra-BMC	2.69	3.27	21.6%
Inter-BMC Presort	4.69	5.33	13.6%
OBMC Entry	4.69	4.88	4.2%
DBMC Entry	2.46	2.55	3.7%
DSCF Entry	2.39	1.91	-20.3%
DDU Entry	2.40	1.48	-38.3%
TOTAL	3.05	3.31	8.5%

20   Source: UPS-Luciani-WP-1. Workshared categories also include impact of
21   prebarcode discount.

22   The overall percentage increase declines from 10.2% to 8.5% when

23   the new rate discounts are taken into consideration. In fact, the rates for many

24   large mailers would decrease significantly. The larger increases for single piece

26.   Exhibit USPS-30D.

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1   and small volume mailers result from the fact that all of the proposed new discounts

2   yield revenue losses significantly in excess of the additional cost savings that

3   would be realized because many shippers are already performing these same

4   worksharing activities in the absence of a discount. For example, 96% of the

5   volume that will qualify for the prebarcode discount is already being prebarcoded.

6   Tr. 8/4139-40. The resulting revenue loss from offering the prebarcode discount

7   without additional offsetting cost savings would be recovered from Parcel Post as a

8   whole.[27] Lower passthroughs would mitigate these differentials between the rate

9   changes for non-worksharing mailers compared to worksharing mailers.

10   The third and perhaps the most important reason for using 77%

11   passthroughs is simply uncertainty about the amount of the costs avoided. That

12   uncertainty is particularly great in the case of the new discounts. The Commission

13   specifically stated in Docket No. R90-1,

14   "We are reluctant to recommend any 100 percent
15   passthrough for a 'new' discount. There is no track
16   record to use to assure ourselves that projected savings
17   will be realized fully, and revenue shortfall avoided."[28]

18   Certainly, in a subclass with a cost coverage as low as that for Parcel Post,

19   protecting against uncertainty is even more important, since an over-estimated cost

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27.   Based on the rate increases shown in Table 8, it is no surprise that the
      Postal Service projects that intra-BMC and inter-BMC volume will decrease
      significantly in the Test Year After Rates, but that DBMC volume will actually
      increase. USPS-T-6, p. 6.

28.   Opinion and Recommended Decision, Docket No. R90-1, page V-134.

1   avoidance passed through at 100% can lead to significant volumes of parcels

2   being carried at below cost rates.[29]

3   Outlined below are nine uncertainties associated with the estimated

4   cost savings in Parcel Post. Many of these uncertainties also apply to the existing

5   DBMC worksharing discount.

6   1.   Imperfect Execution. The Postal Service presumes perfect

7   execution in implementing the new worksharing programs. For example, if inter-

8   BMC presort or OBMC entry parcels are not merely cross-docked at the OBMC but

9   rather are inadvertently sent through OBMC sortation, cost savings would be

10   eliminated. In addition, under the Postal Service's assumptions, a prebarcoded

11   piece would never be inadvertently keyed, DSCF entry pieces would never be sent

12   back to the BMC for rerouting, DDU entry pieces would never be sent back to the

13   DSCF or BMC for rerouting, and the Postal Service would never assist in the

14   unloading of DDU entry pieces. Common sense suggests that such perfection is

15   simply not possible, particularly in the case of new programs.

16   2.   Inexplicable Changes from Prior Cases. The change in the

17   estimated mail processing DBMC entry savings from 11.3 cents per piece in Docket

18   No. R90-1 and 13.4 cents per piece in Docket No. R94-1 to 37.7 cents in this case

19   (26.0 cents with my corrections) is significant. The magnitude of this increase in

20   estimated cost savings is unexplained. This increase affects the OBMC, DBMC,

21   DSCF, and DDU discounts. Moreover, just a few months before this proceeding

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29.   On cross-examination, Ms. Mayes agreed that there was a "smaller margin
       of error" in subclasses with very low cost coverages. Tr. 8/4099.

1   was filed, the Postal Service's estimates of avoided costs were significantly

2   different from those presented here, as shown in Table 9.

3   **Table 9: Proposed Parcel Post Worksharing Avoided Costs**

4   *(cents per piece, unless noted)*

Avoided Cost	MC97-2	R97-1
DBMC Non-Transportation (off of Intra-BMC)	35.1	46.9
OBMC Non-Transportation (off of Inter-BMC)	49.8	57.2
BMC Presort Non-Transportation (off of Inter-BMC)	16.6 to 21.3	12.5 to 13.9
Prebarcoding	4.30	4.00
DSCF Non-Transportation (off of DBMC)	32.5	31.3
DSCF Transportation (off of DBMC Zone 1/2)	$0.3770/cf.	$0.3138/cf.
DDU Non-Transportation (off of DBMC)	50.0	46.0
DDU Transportation (off of DBMC Zone 1/2)	$0.5619/cf.	$0.6475/cf.

14   Sources: USPS-T-37, WP I.I, p. 1; USPS-T-29, Exhibit 29E, p. 1; Docket
15   No. MC97-2, USPS-T-13, WP I.I, p. 1; Docket No. MC97-2,
16   Exhibit USPS-6A.

17   3.   <u>DBMC Parcels Are Different from Other Parcels</u>. DBMC is less

18   dense than Parcel Post as a whole. As a result, for those operations DBMC

19   parcels undergo, it costs more per piece to process DBMC parcels since there are

20   fewer pieces per container. Yet, in the Postal Service's derivation of non-

21   transportation costs, DBMC Parcel Post is assumed to have the average density of

22   Parcel Post as a whole. This assumption inevitably understates the Postal

23   Service's estimates of DBMC costs. Given the lower density of DBMC mail, DBMC

24   mail must have higher unit processing costs than intra-BMC mail from the BMC

25   onward. This difference in density in and of itself justifies retaining a 77%

1   passthrough for DBMC entry. This difference in density for dropshipped mail

2   supports a conservative passthrough for the other entry discounts as well.

3   4.   Plant Load Clerks. Some DBMC mail is verified by Postal

4   Service clerks at the mailer's plant, but these costs are simply attributed to Parcel

5   Post as a whole, not to DBMC specifically. Tr. 19/9585. The fact that this special

6   cost is not allocated to the DBMC, OBMC, DSCF, and DDU mail which causes it

7   supports lowering the passthrough.

8   5.   Empty Inbound Trucks. Increased dropshipping increases the

9   amount of empty space in highway transportation on inbound routes. This is

10   evident from Table 10, which compares capacity utilization for inbound and

11   outbound routes.

12   **Table 10: Highway Capacity Utilization Factors, FY 1996**

	Intra-SCF Transportation		Intra-BMC Transportation	
	Inbound SCF	Outbound SCF	Inbound SCF	Outbound SCF
PQ 1	33%	52%	57%	74%
PQ 2	42%	56%	61%	75%
PQ 3	35%	51%	60%	72%
PQ 4	29%	52%	57%	66%

17   Source: Tr. 7/3260.

18   Clearly, dropshipping causes capacity imbalances. Fairness requires

19   that dropshipped mail should bear an extra portion of the cost of the unused

20   capacity it causes on the inbound legs. This decreases the transportation costs

21   avoided for DBMC, DDU, and DSCF entry from the levels estimated by the Postal

22   Service.

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1   6.   Intra-SCF Transportation Below the DDU Level. The

2   percentage of Parcel Post intra-SCF transportation cost assumed to be avoided by

3   DDU mail (84%) is based on an analysis of total intra-SCF transportation costs, not

4   Parcel Post intra-SCF transportation costs. Tr. 8/3964. Moreover, the percentage

5   is based on intra-SCF data that excludes Postal Owned Vehicles but is applied to

6   Parcel Post transportation costs that include Postal Owned Vehicles. Tr. 8/3954.

7   Thus, there is significant uncertainty surrounding the avoided transportation cost

8   for DDU entry mail.

9   7.   Containerization of DDU Parcels. DDU entry mail could very

10   well arrive in containers that are more costly to handle in the manual parcel

11   sortation area than Parcel Post arriving from the DSCF or the DBMC. For example,

12   currently 27% of the machinable parcels arriving at DDUs are sacked.[30] If more

13   than 27% of DDU entry parcels were sacked, sack shakeout costs would increase.

14   8.   Anecdotal, Ignored, and Incomplete Survey. The survey

15   performed by the Postal Service to estimate the volume of mail that already is

16   performing each worksharing activity and to estimate the additional volume that

17   would perform each worksharing activity if a discount were offered was, in the

18   words of the survey itself, based on "summary anecdotal customer information."[31]

19   In addition, Ms. Mayes simply ignored the survey data for companies that deposit

20   mail for other companies. Tr. 8/4140. Thus, there is considerable uncertainty

21   surrounding the volumes that will respond to the new worksharing discounts. This

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30.   USPS-T-29, Appendix V, p. 2.

31.   LR-H-163, Overview.

1   in turn creates significant uncertainty about the revenue losses that will result.

2   Moreover, there was no survey to estimate DDU volume in light of the new

3   discount. Tr. 8/4152. This creates extreme uncertainty about the revenue losses

4   associated with offering the DDU discount.

5   9.   Simplistic Flowpath Study. Mr. Hatfield used a flowpath study

6   that did not take into account eight of the 13 flowpaths in the postal transportation

7   system that were used by Mr. Acheson in his study of avoided transportation costs

8   for Third Class mail in Docket No. R90-1. In particular, Mr. Hatfield ignored the

9   impact of inter-SCF (i.e., SCF to SCF) travel. Tr. 8/3940. Mr. Acheson sketched

10   out the same 5-path flowpath version used by Mr. Hatfield for Parcel Post, but

11   rejected using it because it was "simplistic."[32] Parcels that "skip around" the five

12   illustrative flowpaths used by Mr. Hatfield onto one of the other eight flowpaths

13   used by Mr. Acheson will incur fewer transportation legs. Common sense suggests

14   that there is more opportunity for an intra-BMC or inter-BMC parcel to "skip around"

15   than there is for a parcel entered midway into the postal network, such as a DBMC

16   parcel. Thus, taking into account these other eight flowpaths would likely lower

17   inter-BMC and intra-BMC transportation costs, and increase DBMC transportation

18   costs.

19   For the reasons outlined above, the DBMC non-transportation

20   passthrough should be set at 77% as in prior cases, and all Parcel Post

21   worksharing cost avoidances for new discounts should have a 77% passthrough for

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32.   Docket No. R90-1, USPS-T-12, p. 7.

1   both transportation and non-transportation avoided costs. The effect of uniformly

2   applying a 77% passthrough is shown in Table 11.

3   **Table 11: Revised Parcel Post Worksharing Avoided Costs and Discounts**
4   *(cents per piece, unless noted)*

Avoided Cost/Discount	Revised Avoided Cost	Discount with 77% Passthrough
DBMC Non-Transportation (off of Intra-BMC)	35.2	27.1
OBMC Non-Transportation (off of Inter-BMC)	45.9	35.3
BMC Presort Non-Transportation (off of Inter-BMC)	12.5 to 13.9	9.6 to 10.7
Prebarcoding	2.66	2.0
DSCF Non-Transportation (off of DBMC)	24.8	19.1
DSCF Transportation (off of DBMC Zone 1/2)	$0.2670/cubic foot	$0.2056/cubic foot
DDU Non-Transportation (off of DBMC)	44.8	34.5
DDU Transportation (off of DBMC Zone 1/2)	$0.6475/cubic foot	$0.4986/cubic foot

14   **THE POSTAL SERVICE HAS FAILED TO**
15   **FOLLOW COMMISSION POLICY IN THE**
16   <u>**DERIVATION OF WORKSHARED RATES**</u>
17

18   The Postal Service has failed to follow Commission policy in the

19   derivation of Parcel Post rates in three particular instances.

20   **A. The DBMC Rates Are Based on a Reduction**
21   **in DBMC's Institutional Cost Contribution,**
22   **Not Just Avoided Costs.**

23   In the past, DBMC rates have always been derived directly as a

24   worksharing discount off of the intra-BMC Parcel Post rates. Ms. Mayes has

25   abandoned this past Postal Service and Commission practice in her rate design.

26   Instead, Ms. Mayes uses the separate derivation of DBMC transportation costs

1   provided by Mr. Hatfield to build this part of DBMC's costs from the ground up,

2   rather than from intra-BMC down. Tr. 8/4116-17. This implicitly passes through

3   not only 100% of DBMC entry transportation cost savings, but also a 15 percent

4   "markup factor" on those savings.

5   This is a significant departure from well-established Commission

6   practice. On cross-examination, Ms. Mayes could supply no real reason -- beyond

7   analytic convenience -- to depart from the normal procedure. Tr. 8/4116-17. I

8   recommend that the Commission continue, as in the past, to derive the DBMC rates

9   as a worksharing discount off of the intra-BMC rates, by simply subtracting the

10   passed through avoided DBMC costs off of the intra-BMC rates, as follows:

11   *DBMC Rate = Intra-BMC Rate - DBMC Non-Transportation Discount - DBMC Transportation Discount.*

12   Since intra-BMC and DBMC transportation costs have been

13   separately estimated by Mr. Hatfield (taking into account the different densities of

14   intra-BMC and DBMC mail), the DBMC transportation discount would be the

15   difference between the intra-BMC transportation cost in each rate cell minus the

16   DBMC transportation cost in the same rate cell.

17   **B. DDU Rates Are Not Computed off**
18   **of the Correct Base Rate**

19   DSCF entry and DDU entry represent additional worksharing beyond

20   DBMC entry. Ms. Mayes quite logically derives DSCF rates by subtracting the

21   costs avoided by DSCF entry from the DBMC rates (albeit with passthroughs that

22   are too high). However, inexplicably, Ms. Mayes derives DDU rates by subtracting

1   cost avoidances from intra-BMC local rates rather than from the DBMC zone 1/2

2   rates.

3   On cross-examination, Ms. Mayes stated that since the DDU volume

4   estimate was obtained by using bulk entered local zone intra-BMC volume, the

5   DDU rates should be based on intra-BMC local zone rates rather than on the

6   DBMC or DSCF rates. Tr. 8/4171-72. This is a non-sequitur. Mr. Hatfield, in

7   deriving the cost of DDU transportation, implicitly assumes that DDU has the same

8   density profile as DSCF and DBMC, since he uses the local transportation costs for

9   the DSCF and DBMC categories to derive the DDU transportation cost avoidance.[33]

10 Despite this, Ms. Mayes' procedure assumes that DDU entry mail will have the

11 same density as intra-BMC Parcel Post. Mr. Hatfield's approach is much more

12 logical.

13   The use of intra-BMC local rates as the base is also highly

14 problematic because it is the least certain of the Parcel Post rates. Mr. Hatfield

15 simply assumes because he has no data that 50% of intra-BMC local parcels would

16 travel to the BMC. Tr. 8/3941.

17   Based on the above, I recommend that the Commission calculate

18 rates for DDU entry in the same manner as Ms. Mayes does for DSCF entry, i.e., by

19 subtracting the DDU avoided costs from the zone 1/2 DBMC rates.

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33.   USPS-T-16, page 24, and Appendix III thereto, page 9.

1   **C. Failure to Follow Commission Policy**
2   **on Rate Cell Decreases**

3   In her rate design, Ms. Mayes allows the DBMC rates in zones 1/2 to

4 decrease from current rates. Tr. 8/4118. The practical effect of Ms. Mayes'

5 approach is to decrease rates for 41% of DBMC volume. Tr. 8/4245. On cross-

6 examination, she agreed that this is inconsistent with past Commission practice;

7 the Commission has not allowed rates for individual Parcel Post rate cells to

8 decrease when an overall rate increase is applied to the subclass. Tr. 8/4106. The

9 Commission should apply its long-standing practice of not decreasing rates in any

10 Parcel Post rate cells when the class as a whole is facing a rate increase.

11   **THE POSTAL SERVICE'S NEW TRANSPORTATION**
12   **COST ANALYSIS LEADS TO RATE ANOMALIES**

13   Mr. Hatfield departs from the Commission's traditional treatment of

14 Parcel Post transportation costs. In large part, his analysis is an improvement.

15 However, his treatment of intra-BMC intermediate transportation costs as not

16 distance related is counter-intuitive and creates serious rate anomalies.

17   Mr. Hatfield's position is based on the argument that intra-BMC

18 intermediate transportation costs are not necessarily distance-related, and thus

19 should never increase as zone increases. Tr. 8/3930. Yet, he also argues that

20 DBMC intermediate transportation costs are distance related, and thus should

21 increase as zone increases.[34] Accepting Mr. Hatfield's argument at face value

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34.   USPS-T-16, page 11.

1   leads to the conclusion that zone 4 and zone 5 intra-BMC parcels cost less to

2   transport than do zone 4 and zone 5 DBMC entry parcels.[35] In other words,

3   additional worksharing yields an increase in transportation costs in the case of a

4   zone 4 or zone 5 DBMC parcel.

5   This leads the Commission to a dilemma. Should the Commission

6   permit a workshared category to have rates which exceed the non-workshared

7   category on which it is based? Ms. Mayes sweeps this problem under the rug by

8   having a constraint in her "final" rate iteration that caps DBMC rates at the final

9   rates for intra-BMC parcels of the same weight and zone. A review of the final

10   DBMC rates shows that nearly 150 DBMC rates are decreased by this treatment.

11   Her "solution" still yields a non-intuitive rate design for DBMC (e.g., the DBMC

12   rates in zone 4 are identical to the zone 4 intra-BMC rates even though the DBMC

13   mailer takes the parcel all the way to the BMC and, in doing so, supposedly saves

14   over 25 cents of processing costs).

15   Rather than attempting to correct these anomalies solely by capping

16   the rates, I suggest a minor modification to Mr. Hatfield's transportation analysis

17   that mitigates the crossover problem. My review of Mr. Hatfield's analysis indicates

18   that he has not fully justified his position that no intra-BMC intermediate

19   transportation costs should be treated as distance related. As Mr. Hatfield

20   suggests, intra-BMC intermediate transportation costs sometimes are linked to

---

35.   USPS-T-16, Exhibit A.

1   distance as measured by Great Circle Distance ("GCD"), and sometimes are not.[36]

2   The greater the difference in the distance from the origin SCF to the BMC and the

3   distance from the BMC to the destination SCF, the more likely that the intermediate

4   transportation distance traveled is linked to GCD.

5   This is illustrated in Table 12, which shows four possible cases in

6   which there are two "close" SCFs, located 10 miles from the BMC, and two "far"

7   SCFs, located 160 miles from the BMC.

8   **Table 12: Relationship Between Distance Traveled and GCD**

	Distance from OSCF to BMC	Distance from BMC to DSCF	Transportation Distance from OSCF to BMC to DSCF	Minimum GCD Distance from OSCF to DSCF	Maximum GCD Distance from OSCF to DSCF
1	Close (10)	Close (10)	20	0	20
2	Close (10)	Far (160)	170	150	170
3	Far (160)	Close (10)	170	150	170
4	Far (160)	Far (160)	320	0	320

13   As can be seen from Table 12, when the OSCF and the DSCF are equidistant from

14   the BMC (cases 1 and 4), transportation distance and GCD are not related.

15   However, when the OSCF and the DSCF are not equidistant from the BMC (cases

16   2 and 3), intermediate transportation is related to GCD.

17   Moreover, Parcel Post can travel in a circuitous route (from SCF to

18   SCF to BMC, for example) rather than the direct routes that Mr. Hatfield uses in his

19   examples. The impact of these types of routes on the relationship between GCD

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36.   GCD is the distance from the origin SCF to the destination SCF and is used
       to determine zone. USPS-T-16, pp. 5-6.

1   and distance is unknown. Consideration of these types of routes is needed if one

2   is to determine the real relationship between distance traveled and GCD.

3   In the absence of a more complete analysis, one cannot say whether

4   intra-BMC intermediate transportation is more fully distance-related or more fully

5   non-distance-related. Mr. Hatfield has not made a convincing case for treating

6   intra-BMC intermediate transportation as completely non-distance related. There is

7   no doubt that intra-BMC intermediate transportation costs are at least partially

8   distance related.

9   Considering all of the relevant issues from both a costing and a rate

10   design perspective, I recommend treating intra-BMC intermediate transportation

11   costs as partially distance-related. To do this, I adjust the transportation costs for

12   intra-BMC Parcel Post so that total intra-BMC transportation costs by zone are an

13   equal amount (in dollars per cubic foot) below the corresponding total of inter-BMC

14   transportation costs by zone.[37] This helps solve the crossover problem between

15   intra-BMC rates and DBMC rates, yields comprehensible rate differentials between

16   intra-BMC rates and inter-BMC rates in all zones, and is as likely to be correct from

17   a cost causation standpoint as Mr. Hatfield's approach. Moreover, it is consistent

18   with historical practice, in that transportation costs for all Parcel Post categories

19   would increase as a function of zone. In Exhibit UPS-T-4F, I have calculated the

20   transportation costs for intra-BMC based on this method.

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37.   Increasing intra-BMC transportation costs by zone at a greater rate than
       inter-BMC transportation costs could yield a crossover problem between
       inter-BMC rates and intra-BMC rates.

1   Treating intra-BMC intermediate transportation costs as distance

2   related helps to alleviate the crossover problem between intra-BMC rates and

3   DBMC rates. However, some crossovers remain. Ms. Mayes' approach, i.e.,

4   capping DBMC rates at the final intra-BMC rates for the same rate cells, has two

5   infirmities. First, Ms. Mayes recovers the lost DBMC revenue from all other Parcel

6   Post rate cells. That is unfair to the single-piece mailer. Ms. Mayes should have

7   recovered the revenue loss by increasing the rates in the unaffected DBMC rate

8   cells. Second, Ms. Mayes' approach results in intra-BMC rates that are equal to

9   DBMC rates in some rate cells. A more logical rate design would be to set the

10   DBMC rate to be no higher than the corresponding intra-BMC rate minus the DBMC

11   non-transportation discount. Capping the affected DBMC rates in this manner

12   means that the DBMC rates would always be lower than the corresponding intra-

13   BMC rates by the amount of the non-transportation cost avoided by DBMC entry.

14   This is similar to the logic of setting Parcel Post rates to be at least 5 cents below

15   the corresponding Priority Mail rates. The recovery of the revenue lost from the

16   affected cells should be recovered from the unaffected DBMC rate cells.

17   Leaving Mr. Hatfield's underlying costs and Ms. Mayes' crossover

18   treatment unchanged would leave the Commission with a permanent severe

19   crossover issue between intra-BMC and DBMC rates, and a permanent non-

20   intuitive rate design for DBMC. My recommendations alleviate both of those

21   concerns.

	NON-TRANSPORTATION
1	
2	WEIGHT RELATED COSTS

3   In the past, the Postal Service and the Commission have added 2

4   cents per pound to Parcel Post rates to account for the effect of weight on non-

5   transportation costs. I am not aware of any empirical basis for the 2 cents per

6   pound figure. However, its complete removal at this time would result in serious

7   disruptions to the rate chart.

8   On the other hand, with the advent of significant worksharing

9   programs in Parcel Post, the 2 cents per pound charge probably overstates the

10   impact of weight on non-transportation costs for workshared mail. For example, if

11   the weight-related mail processing cost for intra-BMC parcels is 2 cents per pound,

12   the weight-related mail processing costs for DDU mail must be substantially less

13   than 2 cents per pound because there are fewer mail processing operations in the

14   case of DDU parcels. The more worksharing, the lower the net non-transportation

15   cost per pound.

16   Reducing the adder for workshared categories would be consistent

17   with the Commission's rate design for Bound Printed Matter, which includes a

18   different non-transportation cost per pound for each of the worksharing

19   categories.[38] I propose that the non-transportation worksharing discounts for

20   DBMC, DSCF, and DDU entry Parcel Post similarly reflect the diminishing impact of

21   weight for workshared categories by using separate per piece and per pound

22   components for non-transportation costs. The 2 cents per pound non-

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38.   Opinion and Recommended Decision, Docket No. R87-1, page 725.

1   transportation charge would continue to be applicable to inter-BMC and intra-BMC

2   mail. The non-transportation worksharing discounts for DBMC, DSCF, and DDU

3   would have a pro rata share of this 2 cents per pound charge applied. The

4   discount then would reflect the portion of the 2 cents per pound charge that is

5   "avoided" by the worksharing category. After subtracting the discount, the resulting

6   rates for DBMC, DSCF, and DDU mail would have a lower cent per pound non-

7   transportation charge embodied within them, reflecting the lower number of

8   processing operations that mail in these categories undergoes.

9   Using this logic, the per piece and per pound components that I

10   recommend for the DBMC, DSCF, and DDU non-transportation discounts are

11   shown in Table 13.

12   Table 13:   Breakdown of Non-Transportation Discounts for DBMC,
13   DSCF, and DDU Entry into Per Piece and Per Pound
14   Components

Discount	Total Cents Per Piece Non-Transportation Discount	Cents per Pound Non-Transportation Discount Component	Cents per Piece Non-Transportation Discount Component
DBMC (off of intra-BMC rates)	27.1	0.329	25.4
DSCF (off of DBMC rates)	19.1	0.232	17.9
DDU (off of DBMC rates)	34.5	0.419	32.3

20   Source: Exhibit UPS-T-4G.

21   The workshared rates would be computed in the normal way, albeit

22   with a new component. For example, DBMC rates would be computed as:

1 *DBMC Rate = Intra-BMC Rate - DBMC Non-Transportation Discount per Piece -*
2 *DBMC Non-Transportation Discount per Pound - DBMC Transportation Discount.*

3 In principle, this breakdown into per piece and per pound components

4 could be performed for all worksharing discounts. For simplicity, I suggest that the

5 BMC presort and OBMC entry discounts not be broken into per piece and per

6 pound components in order to allow these rates to be applied as a straightforward

7 per piece discount.

8 **RECOMMENDED DISCOUNTS AND RATES USING**
9 **100% VARIABILITY FOR MAIL PROCESSING**

10 I have also computed revised worksharing discounts assuming that

11 mail processing labor costs are 100% volume variable. This required replicating

12 Ms. Daniel's and Mr. Crum's models, with adjusted productivity rates and corrected

13 piggyback factors supplied by Mr. Sellick, as well as making the corrections

14 discussed above. See UPS-Luciani-WP-4.

15 In general, the non-transportation discounts are higher, since more

16 mail processing costs are now attributed and therefore a greater amount of costs

17 are avoided by workshared categories, as shown in Table 14. The transportation

18 discounts are unchanged.

| | | Table 14: | | Revised Parcel Post Worksharing Avoided Costs and Discounts with 100% Mail Processing Labor Variability | |

Table 14: **Revised Parcel Post Worksharing Avoided Costs and Discounts with 100% Mail Processing Labor Variability**
(cents per piece, unless noted)

Avoided Cost/Discount	Revised Avoided Cost	Discount with 77% Passthrough
DBMC Non-Transportation (off of Intra-BMC)	42.8	33.0
OBMC Non-Transportation (off of Inter-BMC)	58.2	44.8
BMC Presort Non-Transportation (off of Inter-BMC)	21.1	16.2
Prebarcoding	2.66	2.0
DSCF Non-Transportation (off of DBMC)	36.7	28.3
DSCF Transportation (off of DBMC Zone 1/2)	$0.2670/c.f.	$0.2056/c.f.
DDU Non-Transportation (off of DBMC)	71.7	55.2
DDU Transportation (off of DBMC Zone 1/2)	$0.6475/c.f.	$0.4986/c.f.

Source: UPS-Luciani-WP-4.

I have derived Parcel Post rates using Ms. Mayes' rate design model modified to incorporate the above changes. In addition, this derivation includes the impact of the costing and pricing changes recommended by Dr. Neels, Mr. Sellick, and Dr. Henderson. The results are contained in my Exhibit UPS-T-4H.

PRIORITY MAIL COSTING AND RATE DESIGN

A. Separate Rate Treatment for Parcels

In Docket No. MC95-1, the Commission found that it costs the Postal Service more to process Standard (A) parcels than Standard (A) flats. In light of this finding, we investigated whether there are also processing cost differences between Priority Mail parcels and Priority Mail flats.

1   As shown by Mr. Sellick in UPS-T-2, Priority Mail parcels cost 19.5

2   cents per piece more to process than do Priority Mail flats in the test year.[39] This

3   analysis does not consider the impact of the Priority Mail Processing Center

4   ("PMPC") contract. A review of the PMPC contract data produced by the Postal

5   Service shows that in the PMPC network there will also be a price difference

6   between what the Postal Service will pay for handling flats and what it will pay for

7   handling parcels. Tr. 4/2140-41. On cross-examination, Mr. Sharkey agreed that

8   this difference likely reflected cost differences. Tr. 4/2145-46.

9   The PMPC contract requires the contractor to separate flats from

10   parcels and deliver these different shapes back to the Postal Service in different

11   types of containers. Tr. 4/2143. It seems obvious that once received back into the

12   Postal Service's system, the Priority Mail in flat trays can be sorted more easily

13   (perhaps using a FSM 1000) than in the case of the laborious manual sorting of

14   parcels. Moreover, to assist the contractor, the Postal Service is requesting that its

15   retail units segregate Priority Mail by shape prior to transfer to the PMPC. Tr.

16   4/2086. Thus, the difference in costs between Priority Mail flats and Priority Mail

17   parcels that exists in the Postal Service's network also exists in the PMPC network.

18   There is a significant number of parcels in Priority Mail. In fact,

19   parcels represent 63% of Priority Mail volume.[40] The average weight of the Priority

20   Mail flats observed in IOCS was 1.02 pounds, and the average weight of the

---

39.   The difference is 12.7 cents per piece using Mr. Bradley's recommended
       mail processing variabilities. UPS-Sellick-WP-1-III-A, p. 2.

40.   UPS-T-2, p. 19, Table 5.

1   Priority Mail parcels observed in IOCS was 3.34 pounds.[41] According to IOCS,

2   then, Priority Mail parcels weigh 2.32 pounds more on average than Priority Mail

3   flats. In the Priority Mail rate design, Priority Mail rates increase with weight. This

4   is because increased weight increases transportation costs. Since the 19.4 cents

5   per piece difference in cost between parcels and flats affects only the difference in

6   mail processing costs, the impact of increasing rates by weight for transportation

7   costs does not capture the mail processing cost difference between flats and

8   parcels.

9   The 2.0 cents per pound adder for non-transportation costs in the

10   Priority Mail rate design becomes 4.0 cents per pound with the contingency

11   allowance and the institutional cost markup included. USPS-33N. This adder

12   yields an additional 9.3 cents per piece in the rates charged for the average Priority

13   Mail parcel in comparison to the average Priority Mail flat (4.0 cents per pound

14   multiplied by the 2.32 pound weight difference between parcels and flats) . This

15   additional charge is significantly less than the 19.5 cents per piece mail processing

16   cost difference between flats and parcels.

17   I recommend that the Commission adopt a surcharge of ten cents per

18   piece (19.5 cent cost difference minus 9.3 cent non-transportation weight related

19   cost) for Priority Mail parcels. Use of a surcharge would encourage the Postal

20   Service to keep track in the future of the separate costs it incurs for parcels and for

21   flats. A parcel surcharge would also mitigate the mystifying crossover problem

22   between Parcel Post rates and Priority Mail rates. The crossover check would be

41.   UPS-Sellick-WP-1-III-A.

1   between Priority Mail rates including the parcel surcharge and Parcel Post rates.

2   With the Priority Mail parcel surcharge, Parcel Post rates are less likely to exceed

3   Priority Mail rates for the same rate cell.

4   B. Delivery Confirmation

5   All of the cost of Priority Mail electronic delivery confirmation,

6   designed for large volume users, is included in the base cost of all Priority Mail. A

7   portion of the cost of delivery confirmation incurred for single-piece Priority Mail

8   users (i.e., manual delivery confirmation service) is also included in Priority Mail

9   base rates. This yields a cost coverage for Priority Mail delivery confirmation of

10   69%, as shown in Table 15.

11   Table 15:   Delivery Confirmation Costs and Proposed
12   Charges in Priority Mail
13   (thousands of dollars, unless noted)

	Manual Service	Electronic Service	Total
Test Year Volume (000)	59,440	7,047	66,487
Proposed Fee (cents/piece)	35.0	0.0	NA
Test Year Revenue	20,804	0	20,804
Test Year Non-Subsidized Cost	20,120	0	20,120
Test Year Subsidized Cost	8,924	1,058	9,982
Total Cost	29,044	1,058	30,102
Cost Coverage	72%	0%	69%

21   Sources: USPS-T-40, WP 5; USPS-33N.

22   Fairness requires that the cost of the delivery confirmation activity be

23   borne solely by those who will use it. Stated differently, those who do not use the

24   delivery confirmation service should not pay for the costs incurred in providing it.

-45-

1   The Postal Service does attribute delivery confirmation costs to those who use the

2   service in Standard (B), but not for Priority Mail.

3   Mr. Plunkett argues that offering delivery confirmation will attract new

4   customers and maintain the existing customer base.[42] While this is a rationale for

5   offering a delivery confirmation service, it is not a defense for subsidizing it. The

6   attributable cost for Priority Mail electronic service is essentially equal to the

7   attributable cost of Standard (B) electronic delivery confirmation service. Tr.

8   3/1028-29. I recommend that the Commission impose a fee of 25 cents per

9   transaction for electronic Priority Mail delivery confirmation, which is the same fee

10   proposed by the Postal Service for electronic Standard (B) delivery confirmation.

11   Similarly, the fee for Priority Mail manual delivery confirmation service should be 60

12   cents per transaction, the same as for Standard (B) manual delivery confirmation.

13   With respect to the capital cost of the scanners to be used for delivery

14   confirmation, less than 0.5% finds its way to Priority Mail and Standard (B), as

15   shown in Table 16.

---

42.   USPS-T-40, p. 19.

	Original Estimate		Revised Estimate	
	Cost	**Percent of Total Cost**	**Cost**	**Percent of Total Cost**
Priority Mail	0.4	0.2%	0.3	0.2%
Standard (B)	0.5	0.3%	0.4	0.2%
Other	51.1	27.6%	34.4	20.7%
Total Volume Variable	51.9	28.0%	35.1	21.0%
Non-Volume Variable	133.7	72.0%	131.1	79.0%
TOTAL	185.5	100.0%	166.2	100.0%

Table 16: Allocation of Costs of Scanners, TY 1998
(millions of dollars)

Sources: USPS-T-22, Worksheets C-1 and C-2, and Tr. 3/1254-57.

Mr. Treworgy argues that the scanners will be used for a multitude of purposes and thus their costs should be spread among all classes.[43] However, he has performed no analysis showing the relative value of these other purposes. The significant share of the scanner cost that is not volume variable can be viewed as reflecting the informational uses of the scanners.

It is clear that the onset of delivery confirmation precipitated the purchase of the scanners. As such, I recommend that the entire portion of the cost of the scanners that Mr. Treworgy finds to be volume variable be allocated to only Priority Mail and Standard (B) in proportion to revenue, as shown in Table 17. The use of revenue to allocate the volume variable costs between Priority Mail and Standard (B) takes into account both the higher volume of Priority Mail and its

---

43. One of those purposes applies only to Priority Mail and Standard (B) mail. Tr. 3/1312.

1   higher value (and the resulting greater likelihood that Priority Mail users will use

2   delivery confirmation service).

3   Table 17: Recommended Attributable Cost by Subclass for
4   Capital Cost of New Scanners

5   *(millions of dollars)*

	TYBR Revenues	Percent of Revenues	Attributable Cost (Original)	Attributable Cost (Revised)
Priority Mail	3,979	70.9%	36.8	24.9
Parcel Post	738	13.1%	6.8	4.6
BPM	493	8.8%	4.6	3.1
Special Rate	353	6.3%	3.3	2.2
Library Rate	48	0.9%	0.5	0.3
Total	5,611	100.0%	51.9	35.1

12   Source: Exhibit USPS-30A.

13   <u>ALASKA AIR</u>

14   The Alaska air program has two components: (1) standard Parcel

15   Post that travels by air only because ground transportation is not available in

16   Alaska or is more expensive than air travel, and (2) "bypass" mail that is not

17   handled by the Postal Service's clerks or mailhandlers. POIR No. 4-8. Bypass

18   mail is a special program. Bypass mail is charged intra-BMC Parcel Post rates. Tr.

19   8/4059. It represents 58.8% of Alaska air non-preferential costs. POIR No. 4-8.

20   Since Docket No. R90-1, the Commission has allocated all Alaska

21   non-preferential air costs between attributable and non-attributable costs on the

22   basis of the cost that would have been incurred had the parcels been transported

1   via ground transportation. This results in about 20% of Alaska non-preferential air

2   costs being counted as attributable Parcel Post costs.

3   The Postal Service continues to treat nearly 100% of Alaska non-

4   preferential air costs as attributable to Parcel Post. Since these costs are incurred

5   to handle Parcel Post mail, Tr. 8/4228, 4259, they meet the definition of attributable

6   costs and should be attributed to Parcel Post. At the very least, all of the standard

7   non-bypass Parcel Post air expense (41.2% of total Alaska non-preferential air

8   costs) should be attributed. In this way, all of the non-bypass expenses associated

9   with standard Parcel Post would be attributed to Parcel Post.

10
11   CONCLUSIONS

12   The proposed rates for Parcel Post (1) are based on overstated

13   estimates of worksharing avoided costs, (2) reflect passthroughs that are too high,

14   (3) fail to follow Commission policy in deriving workshared rates, and (4) exhibit

15   rate anomalies resulting from the implementation of a new and imprecise

16   transportation costing analysis. I suggest appropriate corrections for each of these

17   problems.

18   In addition, the costs of processing Priority Mail parcels are

19   significantly higher than the costs of processing Priority Mail flats. This requires

20   separate rate treatment for Priority Mail parcels. Moreover, the proposed treatment

21   of delivery confirmation costs is inequitable and should be revised. Finally, all

22   Alaska air costs should be fully attributed; at a minimum, all non-bypass Alaska air

23   costs should be attributed.

OUTGOING MAIL PROCESSING COSTS AT NON-BMC
FACILITIES AVOIDED BY DBMC PARCEL POST

(Revised to Exclude Costs of Platform Acceptance and Mail Preparation
Operations and to Adjust for Premium Pay)

		Source
A. Costs Avoided		
1. FY 1996 Processing Costs	**$19,922,713**	LR-UPS-Sellick-1-IV-A
2. Base Year 1996 Parcel Post Mail Processing "Piggyback" Factor	0.685	Library Reference H-77
3. Indirect Attributable Costs	$13,647,059	Line 1 * Line 2
4. Total	$33,569,772	Line 1 + Line 3
B. Volumes		
1. FY 1996 Parcel Post volume entered upstream of BMC/ASF	112,738,479	USPS-T-28, Exhibit B, Line 11
C. Unit Costs		
1. Unit Costs Avoided	$0.298	Costs/Volume (Line A4/Line B1)
D. Test Year/Base Year Adjustment		
1. TY/BY Wage Rate Adjustment Factor	1.053	Library Reference H-146
2. 1998 Estimated Test Year Costs Avoided	$0.314	Line C1 * Line D1

Note: See USPS-T-28, Exhibit C, for the Postal Service exhibit upon which this exhibit is based.

OUTGOING MAIL PROCESSING COSTS AT NON-BMC
FACILITIES AVOIDED BY DBMC PARCEL POST

**Revised to: (1) Exclude Costs of Platform Acceptance and Mail Preparation
Operations and to Adjust for Premium Pay
(2) Remove ASF Outgoing Costs When ASF Acts as a BMC**

A. Costs Avoided		Source
1. FY 1996 Processing Costs	**$19,922,713**	LR-UPS-Sellick-1-IV-A
1A. FY 1996 ASF Outgoing Mail Processing Costs When ASF Acts as BMC	**$3,371,728**	UPS-T-4, Exhibit B, page 2
1B. Corrected FY 1996 Processing Costs	$16,550,986	Line 1 - Line 1A
2. Base Year 1996 Parcel Post Mail Processing "Piggyback" Factor	0.685	Library Reference H-77
3. Indirect Attributable Costs	$11,337,425	Line 1B * Line 2
4. Total	$27,888,411	Line 3 + Line 1B

B. Volumes | |
---|---|---
1. FY 1996 Parcel Post volume entered upstream of BMC/ASF | 112,738,479 | USPS-T-28, Exhibit B, Line 11

C. Unit Costs | |
---|---|---
1. Unit Costs Avoided | $0.247 | Costs/Volume (Line A4/Line B1)

D. Test Year/Base Year Adjustment | |
---|---|---
1. TY/BY Wage Rate Adjustment Factor | 1.053 | Library Reference H-146
2. 1998 Estimated Test Year Costs Avoided | $0.260 | Line C1 * Line D1

Note: See USPS-T-28, Exhibit C, for the Postal Service exhibit upon which this exhibit is based.

(1) Calculation of ASF Outgoing Costs When Operating as a BMC for Inter-BMC Volume

Machinable Outgoing Inter-BMC Costs at Origin BMC ($/pc)	$0.3408		[1]
Nonmachinable Outgoing Inter-BMC Costs at Origin BMC ($/pc)	$0.6429		[2]
Percent of Inter-BMC that is machinable	91.25%		[3]
Percent of Inter-BMC that is nonmachinable	8.75%		[4]
Average Inter-BMC Outgoing Costs at Origin BMC		$0.3672	[5]
FY 1996 Inter-BMC Volume with ASF as Origin BMC	4,454,622		[6]
Total ASF Outgoing Costs When Operating as a BMC for Inter-BMC		$1,635,745	[7]

(2) Calculation of ASF Outgoing Costs When Operating as a BMC for Intra-BMC Volume

Machinable Outgoing Intra-BMC ASF Costs at BMC ($/pc)	$0.2264		[8]
Nonmachinable Outgoing Intra-BMC ASF Costs at BMC ($/pc)	$0.4870		[9]
Percent of Intra-BMC that is machinable	91.30%		[10]
Percent of Intra-BMC that is nonmachinable	8.70%		[11]
Average Intra-BMC Outgoing ASF Costs at BMC		$0.2490	[12]
FY 1996 Intra-BMC Volume with ASF as BMC	3,676,595		[13]
Total ASF Outgoing Costs When Operating as a BMC for Intra-BMC		$915,649	[14]

(3) Calculation of ASF Outgoing Costs When Operating as a BMC for DBMC Volume

Machinable Outgoing DBMC ASF Costs at BMC ($/pc)	$0.1322		[15]
Nonmachinable Outgoing DBMC ASF Costs at BMC ($/pc)	$0.6695		[16]
Percent of Intra-BMC that is machinable	92.99%		[17]
Percent of Intra-BMC that is nonmachinable	7.01%		[18]
Average DBMC Outgoing ASF Costs at BMC		$0.1698	[19]
FY 1996 DBMC Volume with ASF as BMC	4,830,403		[20]
Total ASF Outgoing Costs When Operating as a BMC for DBMC		$820,333	[21]

(4) Total ASF Outgoing Costs When Operating as a BMC — $3,371,728 — [22]

1. UPS-Luciani-WP-2, page 1, line 5
2. UPS-Luciani-WP-2, page 1, line 6
3. LR-H-135. 1996 GFY Total Machinable Inter-BMC Parcel Post (60,462,052)/Total Inter-BMC Parcel Post (66,257,981)
4. LR-H-135. 1996 GFY Total Nonmachinable Inter-BMC Parcel Post (5,795,914)/Total Inter-BMC Parcel Post (66,257,981)
5. (Row [3] * Row [1]) + (Row [4] * Row [2])
6. UPS-Luciani-WP-2, page 5
7. Row [5] * Row [6]
8. UPS-Luciani-WP-2, page 1, line 5
9. UPS-Luciani-WP-2, page 1, line 6
10. LR-H-135. 1996 GFY Total Machinable Intra-BMC Parcel Post (41,992,369)/Total Intra-BMC Parcel Post (45,996,280)
11. LR-H-135. 1996 GFY Total Nonmachinable Intra-BMC Parcel Post (4,003,921)/Total Intra-BMC Parcel Post (45,996,280)
12. (Row [10] * Row [8]) + (Row [11] * Row [9])
13. UPS-Luciani-WP-2, page 9
14. Row [12] * Row [13]
15. UPS-Luciani-WP-2, page 1, line 5
16. UPS-Luciani-WP-2, page 1, line 6
17. LR-H-135. 1996 GFY Total Machinable DBMC Parcel Post (89,624,307)/Total DBMC Parcel Post (96,381,277)
18. LR-H-135. 1996 GFY Total Nonmachinable DBMC Parcel Post (6,756,973)/Total DBMC Parcel Post (96,381,277)
19. (Row [17] * Row [15]) + (Row [18] * Row [16])
20. UPS-Luciani-WP-2, page 13
21. Row [19] * Row [20]
22. Row [7] + Row [14] + Row [21]

Calculation of DSCF Savings with Modified Conversion Factor Assumptions

	Machinable	Nonmachinable	Total	
Proportion of DBMC Parcel Post	93%	7%	100%	[1]
(1) DBMC Mail Processing Costs Avoided by Parcel Post Deposited at DSCFs	$0.275	$0.544	$0.294	[2]
(2) After-BMC Downstream Costs				
Postal Network	$0.159	$0.498	$0.183	[3]
DSCF Mail	$0.193	$0.433	$0.210	[4]
DSCF Costs avoided at the DSCF	($0.034)	$0.065	($0.027)	[5]
(3) Total Savings for DSCF Dropship	$0.241	$0.609	$0.266	[6]

[1] Library Reference H-135
[2] USPS-T-28, Exhibit F, page 1
[3] USPS-T-28, Exhibit G, page 2
[4] UPS-T-4C, page 2
[5] Row [3] - [4]
[6] Row [2] + [5]

After BMC downstream costs of DSCF prepared parcel post

Test Year 1998 Wage Rate	$	25.45	[1]
Platform Non-BMC Indirect Attributable Cost (Piggyback Factor)		1.844	[1]
Operation Productivities (pieces per hour)			

	Machinable	Nonmachinable	
	Sacks	GPMC	
Crossdock	12.6	12.6	[1]
Load	325.8	18.6	[1]
Unload	275.1	37.2	[1]
Dump	184.1		
Pieces per Container (Conversion Factor)	5.8	17.37	[2]
Sacks (Crossdock Only)	39.2		[1]
Cost per Handling			
Operation			
Crossdock at SCF	0.0953	0.2150	[3]
Load at SCF	0.0248	0.1454	[3]
Unload at Delivery Unit	0.0294	0.0726	[3]
Dump Sacks at Delivery Unit	0.0439		[3]
Total	**0.1933**	**0.4330**	[4]

Derivation of the GPMC Conversion Factor

[5]	[6]	[7]	[8]	[9]
Avg. % Container Fullness	Cubic feet per GPMC	Size of avg. NMO (in cubic ft)	Effective Cubic Capacity	Capacity at avg. fullness (in pieces)
88%	36.40	1.844	19.74	17.37

[1]   USPS-T-28, Exhibit G, page 1

[2]   USPS-T-29, Appendix V, page 17. UPS-T-4C, page 2, column [9]

[3]   (Wage rate * piggyback factor)/(Conversion Factor * productivity)

[4]   Sum [3]

[5]   Average Container Fullness of a Gaylord used for OBMC entry, USPS-T-29, Appendix V, page 17

[6]   Library Reference H-133 (Container Methods), page 14

[7]   USPS-T-29, Appendix V, page 17

[8]   Column [6]/Column [7]

[9]   Column [5] * Column [8]

Adjustment to DSCF Dropship Savings to Account
for Postal Service Assistance in Unloading at the SCF

DBMC Parcel Post							
Machinable	93%						[1]
Nonmachinable	7%						[1]

	[A] # handlings	[B] units/hr	[C] conversion	[D] piggyback	[E] $ per oper	[F] $ per facility	
I. Machinable Parcel Post							
Unload Bedload Sacks at DSCF	1	275.1	5.8	1.844	$ 0.0294	$ 0.0294	[2]
Postal Service Share of Work						50%	[3]
DSCF Costs						$ 0.0147	[4]
II. Nonmachinable Parcel Post							
Unload Containers	1	37.2	17.37	1.844	$ 0.0726	$ 0.0726	[5]
Postal Service Share of Work						100%	[6]
DSCF Costs						$ 0.0726	[7]
III. Total Unloading Costs for Postal Assistance with DSCF Dropship Mail						$ 0.0187	[8]
Test Year Wage Rate	$25.445						[9]

[1] Library Reference H-135

[2.A] All machinable parcel post will arrive bedloaded in order to qualify for the DSCF discount.

[2.B] USPS-T-29, Appendix V, page 11

[2.C] USPS-T-29, Appendix V, page 11

[2.D] USPS-T-29, Appendix V, page 11

[3] It is assumed that the Postal Service's assistance in unloading sacks at the DSCF will amount to 50% of normal unloading costs.

[4] Row 2 * Row 3

[5.A] All nonmachinable parcel post will arrive in GPMCs in order to qualify for the DSCF discount.

[5.B] USPS-T-29, Appendix V, page 12

[5.C] UPS-T-4, Exhibit C

[5.D] USPS-T-29, Appendix V, page 12

[6] Per current policy, the Postal Service will unload all nonmachinable containers at SCFs.

[7] Row 5 * Row 6

[8] (Row 4 * Row 1) + (Row 7 * Row 1)

[9] Library Reference H-146

[E] (Row 9 * column [D])/(Column [B] * column [C])

[F] Column [E] * column [A]

DDU Dropship Savings with Sack Shakeout Costs Removed
($ per piece)

USPS Witness Crum's Proposed DDU Dropship Discount   **$0.459**   [1]

Postal Service using Daniel

	Machinable	Nonmachinable	Total	
Proportion	93%	7%	100%	[2]
Savings at BMC	$0.275	$0.544	$0.294	[3]
Savings at DSCF	$0.110	$0.369	$0.128	[4]
Savings at DDU				
Unload Bedload	$0.008	$0.046	$0.010	[4]
Unload Loose in OTR	$0.010	$0.025	$0.011	[4]
Unload OWC	$0.005	$0.013	$0.005	[4]
Total Savings	$0.407	$0.996	**$0.448**	[5]
Difference			**$0.011**	[6]

[1] USPS-T-28, page 8. Mail processing costs avoided at the BMC (.294) + mail processing costs avoided
    at the DSCF and DDU (.165) totals .459

[2] Library Reference H-135

[3] USPS-T-28, Exhibit F, page 1

[4] USPS-T-29, Appendix V, pages 11 & 12, column 6

[5] Row [3] + Row [4]

[6] Row [1] - Row [5]

USPS WITNESS HATFIELD'S TEST YEAR PARCEL POST UNIT TRANSPORTATION COSTS
(dollars per cubic foot)

	Inter-BMC	Intra-BMC	DBMC (Non-DSCF)
Local	N/A	$0.940	N/A
Zone 1/2	$2.103	$1.753	$0.714
Zone 3	$2.544	$1.753	$1.533
Zone 4	$3.194	$1.753	$2.276
Zone 5	$4.224	$1.753	$4.446
Zone 6	$5.442	N/A	N/A
Zone 7	$7.100	N/A	N/A
Zone 8	$9.842	N/A	N/A

PARCEL POST TEST YEAR UNIT TRANSPORTATION COSTS REVISED
TO REFLECT A CONSTANT DIFFERENCE BETWEEN INTER-BMC AND INTRA-BMC
(dollars per cubic foot)

	Inter-BMC	Intra-BMC	DBMC (Non-DSCF)
Local	N/A	$0.940	N/A
Zone 1/2	$2.103	$1.677	$0.714
Zone 3	$2.544	$2.119	$1.533
Zone 4	$3.194	$2.768	$2.276
Zone 5	$4.224	$3.799	$4.446
Zone 6	$5.442	N/A	N/A
Zone 7	$7.100	N/A	N/A
Zone 8	$9.842	N/A	N/A

DIFFERENCE

	Inter-BMC	Intra-BMC	DBMC (Non-DSCF)
Local	N/A	($0.000)	N/A
Zone 1/2	($0.000)	($0.075)	$0.000
Zone 3	($0.000)	$0.366	($0.000)
Zone 4	$0.000	$1.016	($0.000)
Zone 5	$0.000	$2.046	($0.000)
Zone 6	$0.000	N/A	N/A
Zone 7	$0.000	N/A	N/A
Zone 8	$0.000	N/A	N/A

Sources: USPS-T-16, Appendix III, pages 6 and 8 and UPS-T-4F, page 2.

Parcel Post Transportation Cost By Rate Category and Zone
Calculation of Intra-BMC Transportation Costs per Pound by Zone

Intra-BMC parcel transportation costs by function and distance relation

Local transportation costs incurred by Intra-BMC parcels (non-distance related)	1/	$	17,828
Intermediate transportation costs incurred by Intra-BMC parcels (non-distance related)	2/	$	21,355
Long distance transportation costs incurred by Intra-BMC parcels	3/	$	-
Total Intra-BMC parcel transportation costs	4/	$	**39,182**

	[1]	[2] Average Local/ Intermediate Legs	[3] Average Cubic Foot Legs	[4] Percent	[5] Local Transportation Costs	[6] Intermediate Transportation Costs
	Cubic Feet					
Local Zone	1,460,249	1	1,460,249	3.27%	487	699
Non-local zone	21,572,870	2	43,145,740	96.73%	14,398	20,656
Intra-city/box route adjustment 5/					2,942	
Total	23,033,119		44,605,989	100.00%	17,828	21,355

Zone	[7] Local unit trans. costs ($/cf)	[8] Intermediate unit trans. costs ($/cf)	[9] Total Unit Trans. Costs ($cf)	[10] Reconcile to total trans. costs (000)	[11] TY98 Cubic Feet by Zone	[12] Inter-BMC minus Intra BMC
Local	$0.4615	$0.4787	$0.9402	$1,373	1,460,249	
1-2	$0.7952	$0.8823	$1.6774	$31,344	18,685,824	$0.4254
3	$0.7952	$1.3234	$2.1186	$5,050	2,383,554	$0.4254
4	$0.7952	$1.9732	$2.7684	$1,336	482,631	$0.4254
5	$0.7952	$3.0038	$3.7989	$79	20,861	$0.4254
6	N/A	N/A	N/A	N/A	0	
7	N/A	N/A	N/A	N/A	0	
8	N/A	N/A	N/A	N/A	0	
Total				$39,182	23,033,119	

Row 1/: USPS-T-16, Appendix I, page 13, row 19.

Row 2/: USPS-T-16, Appendix I, page 13, row 19.

Row 3/: USPS-T-16, Appendix I, page 13, row 19.

Row 4/: Row 1 + row 2 + row 3.

Row 5/: Row 1 * (1 - USPS-T-16, Appendix III, page 9, row 10).

Column [1]: USPS-T-16, Appendix II, page 9, column 2, intra-BMC cubic feet in the local zone and all other zones.

Column [2]: Local zone legs reflect half of the local parcels being held out at the AO. Non-local zone legs reflect typical intra-BMC parcel.

Column [3]: Column 1 * column 2.

Column [4]: Percentage of cubic foot legs from column 3.

Column [5]: (Row 1 - row 5) * column 4.

Column [6]: Row 2 * column 4.

Column [7]: Local zone unit cost = (local zone costs from column 5 / local zone cubic feet from column 1) + row 5 / total cubic feet.

Non-local zone unit cost = (non-local zone costs from column 5 / non-local zone cubic feet from column 1) + row 5 / total cubic feet.

Column [8]: Intra-BMC intermediate transportation costs were reallocated until the slope of total intra-BMC unit transportation costs matched

that of total inter-BMC unit transportation costs. The local portion of intermediate transportation was not changed.

Column [9]: Column 7 + column 8.

Column [10]: Column 9 * column 11.

Column [11]: USPS-T-16, Appendix II, page 9, column 2 (intra-BMC cubic feet by zone).

Column [12]: USPS-T-16 Appendix III, page 6, column 11 (inter-BMC total unit transportation costs) - column 9.

Average TYBR Non-Transportation Cost per Piece
for Intra-BMC and Inter-BMC Parcel Post

				Source
[1]	TYBR Non-Transportation Costs	$411,492,180		USPS-T-37 WP I.I., page 2.
[2]	DBMC NT Cost Saving per Piece	$	0.352	Table 11.
[3]	DBMC Volume	136,730,338		USPS-T-37 WP I.A., page 1.
[4]	DBMC Cost Savings	$ 48,129,079		[2] * [3].
[5]	DSCF NT Cost Saving per Piece	$	0.248	Table 11.
[6]	DSCF Existing Volume	7,978,299		USPS-T-37 WP I.A., page 21-22.
[7]	DSCF Cost Savings	$ 1,978,618		[5] * [6].
[8]	DDU NT Cost Saving per Piece	$	0.448	Table 11.
[9]	DDU Existing Volume	958,192		USPS-T-37 WP I.A., page 23.
[10]	DDU Cost Savings	$ 429,270		[8] * [9].
[11]	TOTAL DBMC/DSCF/DDU Cost Savings	$ 50,536,967		[4] + [7] + [10].
[12]	Adjusted TYBR NT Costs	$462,029,147		[1] + [11].
[13]	Parcel Post Volume	241,599,000		USPS-T-37 WP I.A., page 1.
[14]	Average NT Cost per Piece	$ 1.91238		[12] / [13].

Per Piece and Per Pound Components
for DBMC, DSCF, and DDU Non-Transportation

[1]	$0.02 * Contingency * Markup	$	0.02323	Contingency = 1.01, Markup Factor = USPS-T-37, WP I.I., page 2, Line 8.
[2]	Average NT Cost per Piece	$	1.91238	From above.
[3]	DBMC NT Discount	$	0.27100	Table 11.
[4]	DBMC NT per Pound Component	$	0.00329	([1] / [2]) * [3].
[5]	DBMC NT per Piece Component	$	0.25402	[3] - ([4] * [12]).
[6]	DSCF NT Discount	$	0.19100	Table 11.
[7]	DSCF NT per Pound Component	$	0.00232	([1] / [2]) * [6].
[8]	DSCF NT per Piece Component	$	0.17903	[6] - ([7] * [12]).
[9]	DDU NT Discount	$	0.34500	Table 11.
[10]	DDU NT per Pound Component	$	0.00419	([1] / [2]) * [9].
[11]	DDU NT per Piece Component	$	0.32338	[9] - ([10] * [12]).
[12]	Average Postal Pounds (Dropshipped)		5.15836	USPS-T-37 WP I.B., page 2 DBMC Total Postage Pounds / Total Volume.

Table 1
Parcel Post
Recommended Intra-BMC Rates
(Dollars)

Weight (Pounds)	Local	Zones 1 & 2	Zone 3	Zone 4	Zone 5
2	$2.75	$2.94	$3.05	$3.23	$3.50
3	$2.90	$3.20	$3.38	$3.65	$4.05
4	$3.04	$3.44	$3.68	$4.03	$4.59
5	$3.19	$3.68	$3.96	$4.39	$5.08
6	$3.32	$3.89	$4.23	$4.73	$5.53
7	$3.44	$4.09	$4.47	$5.05	$5.95
8	$3.55	$4.28	$4.71	$5.34	$6.35
9	$3.67	$4.45	$4.92	$5.62	$6.74
10	$3.77	$4.62	$5.14	$5.88	$7.12
11	$3.87	$4.72	$5.33	$6.14	$7.47
12	$3.97	$4.84	$5.52	$6.37	$7.80
13	$4.07	$4.95	$5.70	$6.60	$8.11
14	$4.15	$5.05	$5.87	$6.82	$8.41
15	$4.24	$5.14	$6.04	$7.03	$8.68
16	$4.32	$5.23	$6.19	$7.22	$8.96
17	$4.40	$5.33	$6.34	$7.42	$9.21
18	$4.47	$5.41	$6.49	$7.60	$9.47
19	$4.55	$5.51	$6.63	$7.77	$9.69
20	$4.63	$5.59	$6.76	$7.95	$9.91
21	$4.70	$5.66	$6.89	$8.10	$10.13
22	$4.76	$5.75	$7.02	$8.26	$10.34
23	$4.83	$5.83	$7.14	$8.42	$10.53
24	$4.89	$5.89	$7.26	$8.56	$10.71
25	$4.95	$5.96	$7.37	$8.70	$10.90
26	$5.03	$6.03	$7.49	$8.85	$11.07
27	$5.09	$6.11	$7.59	$8.98	$11.23
28	$5.14	$6.17	$7.70	$9.11	$11.40
29	$5.20	$6.24	$7.80	$9.24	$11.56
30	$5.26	$6.30	$7.90	$9.37	$11.71
31	$5.31	$6.38	$8.00	$9.49	$11.86
32	$5.37	$6.44	$8.09	$9.60	$12.00
33	$5.42	$6.50	$8.18	$9.71	$12.14
34	$5.47	$6.56	$8.27	$9.83	$12.28
35	$5.53	$6.62	$8.37	$9.94	$12.41
36	$5.58	$6.68	$8.45	$10.04	$12.54
37	$5.63	$6.73	$8.53	$10.14	$12.67
38	$5.68	$6.79	$8.61	$10.24	$12.81
39	$5.73	$6.85	$8.69	$10.34	$12.93
40	$5.77	$6.90	$8.77	$10.44	$13.05
41	$5.82	$6.97	$8.85	$10.53	$13.18
42	$5.86	$7.02	$8.93	$10.62	$13.30
43	$5.91	$7.06	$9.00	$10.71	$13.41
44	$5.95	$7.12	$9.07	$10.80	$13.52
45	$6.01	$7.17	$9.14	$10.89	$13.62
46	$6.05	$7.23	$9.22	$10.97	$13.74
47	$6.09	$7.29	$9.29	$11.05	$13.84
48	$6.14	$7.33	$9.36	$11.13	$13.94
49	$6.18	$7.38	$9.43	$11.21	$14.04

Table 1
Parcel Post
Recommended Intra-BMC Rates
(Dollars)

Weight (Pounds)	Local	Zones 1 & 2	Zone 3	Zone 4	Zone 5
50	$6.22	$7.42	$9.49	$11.29	$14.15
51	$6.26	$7.48	$9.56	$11.37	$14.24
52	$6.30	$7.52	$9.62	$11.44	$14.34
53	$6.34	$7.57	$9.68	$11.52	$14.43
54	$6.38	$7.61	$9.74	$11.59	$14.52
55	$6.42	$7.66	$9.80	$11.66	$14.61
56	$6.46	$7.72	$9.87	$11.74	$14.70
57	$6.50	$7.76	$9.92	$11.80	$14.78
58	$6.54	$7.81	$9.98	$11.87	$14.87
59	$6.58	$7.85	$10.03	$11.94	$14.95
60	$6.62	$7.90	$10.09	$12.00	$15.03
61	$6.65	$7.96	$10.14	$12.06	$15.12
62	$6.69	$8.00	$10.20	$12.13	$15.19
63	$6.72	$8.03	$10.25	$12.19	$15.27
64	$6.76	$8.08	$10.31	$12.26	$15.35
65	$6.80	$8.12	$10.36	$12.32	$15.42
66	$6.83	$8.18	$10.41	$12.38	$15.49
67	$6.87	$8.22	$10.46	$12.44	$15.57
68	$6.90	$8.25	$10.51	$12.49	$15.64
69	$6.94	$8.30	$10.56	$12.55	$15.71
70	$6.98	$8.34	$10.61	$12.61	$15.78

Notes:

1   For prebarcoded mail, deduct $0.02 per piece.
2   Pieces with combined length and girth exceeding 84 inches and weight under 15 pounds pay the applicable 15-pound rate.
3   Pieces exceeding 108 inches in combined length and girth pay the applicable 70-pound rate.
4   For each pickup stop, add $8.25.
5   Add $0.50 per piece for hazardous medical materials and $1.00 per piece for other mailable hazardous materials.

Source: UPS-Luciani-WP-3

Table 2
Parcel Post
Recommended Machinable Inter-BMC Rates
(Dollars)

Weight (Pounds)	Zones 1 & 2	Zone 3	Zone 4	Zone 5	Zone 6	Zone 7	Zone 8
2	$3.60	$3.73	$3.94	$4.26	$4.40	$4.40	$4.40
3	$3.97	$4.20	$4.51	$5.01	$5.61	$5.89	$5.89
4	$4.28	$4.62	$5.04	$5.71	$6.50	$7.38	$7.38
5	$4.43	$5.00	$5.53	$6.34	$7.30	$8.62	$8.87
6	$4.57	$5.29	$5.96	$6.91	$8.04	$9.58	$11.85
7	$4.71	$5.53	$6.37	$7.46	$8.72	$10.46	$13.33
8	$4.86	$5.74	$6.75	$7.95	$9.36	$11.28	$14.44
9	$4.96	$5.95	$7.10	$8.40	$9.94	$12.02	$15.47
10	$5.10	$6.14	$7.43	$8.82	$10.48	$12.72	$16.42
11	$5.20	$6.33	$7.73	$9.22	$10.98	$13.37	$17.31
12	$5.32	$6.51	$8.02	$9.59	$11.45	$13.97	$18.14
13	$5.42	$6.66	$8.28	$9.94	$11.89	$14.53	$18.92
14	$5.53	$6.84	$8.54	$10.26	$12.30	$15.06	$19.64
15	$5.62	$6.99	$8.77	$10.57	$12.69	$15.57	$20.33
16	$5.71	$7.14	$9.00	$10.86	$13.05	$16.04	$20.96
17	$5.81	$7.27	$9.21	$11.13	$13.39	$16.47	$21.82
18	$5.89	$7.41	$9.42	$11.39	$13.72	$16.89	$22.40
19	$5.99	$7.54	$9.61	$11.63	$14.03	$17.29	$23.25
20	$6.06	$7.66	$9.79	$11.87	$14.32	$17.66	$23.84
21	$6.14	$7.79	$9.97	$12.09	$14.60	$18.02	$24.41
22	$6.23	$7.90	$10.13	$12.30	$14.86	$18.35	$24.96
23	$6.30	$8.03	$10.28	$12.50	$15.12	$18.68	$25.47
24	$6.36	$8.14	$10.44	$12.70	$15.36	$18.99	$25.97
25	$6.44	$8.24	$10.58	$12.88	$15.59	$19.28	$26.45
26	$6.51	$8.34	$10.72	$13.05	$15.81	$19.56	$26.91
27	$6.59	$8.45	$10.86	$13.22	$16.01	$19.82	$27.34
28	$6.65	$8.55	$10.98	$13.38	$16.22	$20.08	$27.77
29	$6.72	$8.66	$11.10	$13.53	$16.41	$20.33	$28.17
30	$6.78	$8.75	$11.22	$13.69	$16.60	$20.56	$28.57
31	$6.85	$8.82	$11.34	$13.83	$16.77	$20.78	$28.94
32	$6.91	$8.93	$11.45	$13.96	$16.94	$21.00	$29.30
33	$6.97	$9.01	$11.55	$14.09	$17.11	$21.20	$29.66
34	$7.03	$9.09	$11.65	$14.23	$17.27	$21.41	$30.00
35	$7.09	$9.18	$11.76	$14.35	$17.41	$21.60	$30.33
36	$7.15	$9.25	$11.85	$14.47	$17.57	$21.78	$30.64
37	$7.21	$9.33	$11.94	$14.58	$17.70	$21.96	$30.94
38	$7.27	$9.42	$12.03	$14.70	$17.84	$22.12	$31.24
39	$7.33	$9.49	$12.11	$14.80	$17.98	$22.29	$31.53
40	$7.38	$9.57	$12.19	$14.90	$18.10	$22.45	$31.81
41	$7.45	$9.66	$12.28	$15.00	$18.22	$22.60	$32.07
42	$7.49	$9.71	$12.36	$15.10	$18.33	$22.75	$32.33
43	$7.54	$9.79	$12.44	$15.20	$18.46	$22.89	$32.58
44	$7.60	$9.85	$12.51	$15.28	$18.56	$23.02	$32.83
45	$7.64	$9.92	$12.58	$15.37	$18.67	$23.15	$33.06
46	$7.70	$10.00	$12.65	$15.45	$18.77	$23.29	$33.30
47	$7.76	$10.06	$12.73	$15.55	$18.87	$23.41	$33.52
48	$7.81	$10.13	$12.79	$15.62	$18.97	$23.53	$33.73
49	$7.85	$10.19	$12.85	$15.70	$19.06	$23.64	$33.95

Table 2
Parcel Post
Recommended Machinable Inter-BMC Rates
(Dollars)

Weight (Pounds)	Zones 1 & 2	Zone 3	Zone 4	Zone 5	Zone 6	Zone 7	Zone 8
50	$7.90	$10.25	$12.92	$15.78	$19.15	$23.76	$34.15
51	$7.96	$10.31	$12.98	$15.85	$19.24	$23.86	$34.35
52	$8.00	$10.39	$13.03	$15.92	$19.32	$23.97	$34.54
53	$8.05	$10.44	$13.09	$15.99	$19.41	$24.07	$34.74
54	$8.09	$10.50	$13.16	$16.06	$19.49	$24.17	$34.92
55	$8.14	$10.55	$13.21	$16.13	$19.57	$24.27	$35.10
56	$8.20	$10.62	$13.27	$16.19	$19.65	$24.36	$35.27
57	$8.24	$10.68	$13.32	$16.25	$19.72	$24.44	$35.44
58	$8.28	$10.73	$13.37	$16.31	$19.79	$24.53	$35.60
59	$8.33	$10.79	$13.42	$16.37	$19.87	$24.65	$35.76
60	$8.37	$10.85	$13.47	$16.43	$19.93	$24.75	$35.92
61	$8.43	$10.91	$13.51	$16.48	$20.00	$24.86	$36.07
62	$8.48	$10.95	$13.56	$16.55	$20.06	$24.97	$36.22
63	$8.51	$11.01	$13.61	$16.60	$20.12	$25.06	$36.37
64	$8.55	$11.06	$13.66	$16.65	$20.18	$25.18	$36.50
65	$8.60	$11.12	$13.70	$16.70	$20.24	$25.27	$36.64
66	$8.66	$11.18	$13.75	$16.75	$20.30	$25.36	$36.77
67	$8.70	$11.22	$13.79	$16.80	$20.36	$25.46	$36.91
68	$8.73	$11.26	$13.83	$16.84	$20.42	$25.54	$37.04
69	$8.78	$11.31	$13.87	$16.89	$20.47	$25.65	$37.15
70	$8.82	$11.38	$13.91	$16.94	$20.52	$25.73	$37.28

Notes:

1. For nonmachinable inter-BMC parcels, add $1.90 per piece.
2. For each pickup stop, add $8.25.
3. For OBMC discount, deduct $0.448 per piece.
4. For BMC presort, deduct $0.162 per piece.
5. For prebarcoded mail, deduct $0.02 per piece.
6. Pieces with combined length and girth exceeding 84 inches and weight under 15 pounds pay the applicable 15-pound rate.
7. Pieces exceeding 108 inches in combined length and girth pay the applicable 70-pound rate.
8. Add $0.50 per piece for hazardous medical materials and $1.00 per piece for other mailable hazardous materials.

Source: UPS-Luciani-WP-3

Table 3
Parcel Post
Recommended Destination BMC Rates
(Dollars)

Weight (Pounds)	Zones 1 & 2	Zone 3	Zone 4	Zone 5
2	$2.47	$2.72	$2.90	$3.17
3	$2.63	$3.05	$3.32	$3.72
4	$2.80	$3.35	$3.70	$4.26
5	$2.96	$3.63	$4.06	$4.75
6	$3.09	$3.90	$4.40	$5.20
7	$3.23	$4.14	$4.72	$5.62
8	$3.36	$4.38	$5.01	$6.02
9	$3.47	$4.59	$5.29	$6.41
10	$3.58	$4.81	$5.55	$6.79
11	$3.70	$4.99	$5.81	$7.14
12	$3.80	$5.18	$6.04	$7.47
13	$3.89	$5.35	$6.27	$7.78
14	$3.99	$5.53	$6.49	$8.08
15	$4.08	$5.68	$6.70	$8.35
16	$4.16	$5.82	$6.89	$8.63
17	$4.25	$5.97	$7.09	$8.88
18	$4.32	$6.11	$7.27	$9.14
19	$4.40	$6.25	$7.44	$9.36
20	$4.48	$6.37	$7.62	$9.58
21	$4.54	$6.50	$7.77	$9.80
22	$4.62	$6.62	$7.93	$10.01
23	$4.69	$6.73	$8.09	$10.20
24	$4.76	$6.84	$8.23	$10.38
25	$4.82	$6.96	$8.37	$10.57
26	$4.88	$7.06	$8.52	$10.74
27	$4.94	$7.16	$8.65	$10.90
28	$5.00	$7.26	$8.78	$11.07
29	$5.07	$7.35	$8.91	$11.23
30	$5.13	$7.45	$9.04	$11.38
31	$5.17	$7.54	$9.16	$11.53
32	$5.23	$7.62	$9.27	$11.67
33	$5.28	$7.71	$9.38	$11.81
34	$5.33	$7.79	$9.50	$11.95
35	$5.39	$7.87	$9.61	$12.08
36	$5.44	$7.96	$9.71	$12.21
37	$5.48	$8.03	$9.81	$12.34
38	$5.54	$8.10	$9.91	$12.48
39	$5.58	$8.18	$10.01	$12.60
40	$5.63	$8.25	$10.11	$12.72
41	$5.67	$8.31	$10.20	$12.85
42	$5.72	$8.40	$10.29	$12.97
43	$5.76	$8.46	$10.38	$13.08
44	$5.81	$8.53	$10.47	$13.19
45	$5.85	$8.59	$10.56	$13.29
46	$5.89	$8.65	$10.64	$13.41
47	$5.93	$8.72	$10.72	$13.51
48	$5.97	$8.77	$10.80	$13.61
49	$6.02	$8.83	$10.88	$13.71

Table 3
Parcel Post
Recommended Destination BMC Rates
(Dollars)

Weight (Pounds)	Zones 1 & 2	Zone 3	Zone 4	Zone 5
50	$6.06	$8.90	$10.96	$13.82
51	$6.10	$8.96	$11.04	$13.91
52	$6.13	$9.01	$11.11	$14.01
53	$6.18	$9.07	$11.19	$14.10
54	$6.21	$9.12	$11.26	$14.19
55	$6.24	$9.19	$11.33	$14.28
56	$6.28	$9.24	$11.41	$14.37
57	$6.32	$9.28	$11.47	$14.45
58	$6.35	$9.35	$11.54	$14.54
59	$6.39	$9.39	$11.61	$14.62
60	$6.42	$9.45	$11.67	$14.70
61	$6.47	$9.49	$11.73	$14.79
62	$6.50	$9.54	$11.80	$14.86
63	$6.53	$9.59	$11.86	$14.94
64	$6.57	$9.63	$11.93	$15.02
65	$6.60	$9.68	$11.99	$15.09
66	$6.64	$9.72	$12.05	$15.16
67	$6.66	$9.76	$12.11	$15.24
68	$6.69	$9.81	$12.16	$15.31
69	$6.73	$9.86	$12.22	$15.38
70	$6.76	$9.91	$12.28	$15.45

Notes:
1   For prebarcoded mail, deduct $0.02 per piece.
2   Pieces with combined length and girth exceeding 84 inches and weight under 15 pounds pay the applicable 15-pound rate.
3   Pieces exceeding 108 inches in combined length and girth pay the applicable 70-pound rate.
4   Add $0.50 per piece for hazardous medical materials and $1.00 per piece for other mailable hazardous materials.

Source: UPS-Luciani-WP-3

Table 4
Parcel Post
Recommended Destination SCF and
Destination Delivery Unit Rates
(Dollars)

Weight (Pounds)	DSCF Rates	DDU Rates
2	$2.12	$1.77
3	$2.25	$1.85
4	$2.39	$1.93
5	$2.51	$2.01
6	$2.61	$2.07
7	$2.72	$2.14
8	$2.83	$2.21
9	$2.91	$2.25
10	$3.00	$2.31
11	$3.10	$2.37
12	$3.17	$2.43
13	$3.24	$2.47
14	$3.32	$2.53
15	$3.40	$2.57
16	$3.45	$2.61
17	$3.53	$2.66
18	$3.58	$2.69
19	$3.65	$2.73
20	$3.71	$2.78
21	$3.76	$2.80
22	$3.83	$2.84
23	$3.87	$2.89
24	$3.93	$2.92
25	$3.98	$2.96
26	$4.03	$2.98
27	$4.08	$3.02
28	$4.13	$3.05
29	$4.19	$3.10
30	$4.24	$3.13
31	$4.26	$3.15
32	$4.31	$3.18
33	$4.36	$3.21
34	$4.39	$3.23
35	$4.44	$3.28
36	$4.48	$3.30
37	$4.52	$3.32
38	$4.56	$3.36
39	$4.60	$3.38
40	$4.64	$3.41
41	$4.67	$3.43
42	$4.71	$3.46
43	$4.74	$3.48
44	$4.79	$3.52
45	$4.81	$3.53
46	$4.85	$3.56
47	$4.88	$3.58
48	$4.92	$3.61

Table 4
Parcel Post
Recommended Destination SCF and
Destination Delivery Unit Rates
(Dollars)

Weight (Pounds)	DSCF Rates	DDU Rates
49	$4.95	$3.64
50	$4.99	$3.67
51	$5.03	$3.69
52	$5.05	$3.70
53	$5.09	$3.74
54	$5.11	$3.75
55	$5.14	$3.77
56	$5.17	$3.79
57	$5.20	$3.82
58	$5.23	$3.83
59	$5.26	$3.86
60	$5.28	$3.88
61	$5.33	$3.92
62	$5.35	$3.93
63	$5.38	$3.95
64	$5.41	$3.97
65	$5.44	$4.00
66	$5.47	$4.02
67	$5.48	$4.02
68	$5.51	$4.05
69	$5.54	$4.07
70	$5.57	$4.09

Notes:
1   Pieces with combined lenght and girth exceeding 84 inches and weight under 15 pounds pay the applicable 15-pound rate.
2   Pieces exceeding 108 inches in combined length and girth pay the applicable 70-pound rate.
3   Add $0.50 per piece for hazardous medical materials and $1.00 per piece for other mailable hazardous materials.

Source: UPS-Luciani-WP-3